



Chapter 3

Existing Conditions

Existing transportation conditions were evaluated as part of the City of Beaverton Transportation System Plan. This chapter summarizes existing traffic and transportation operation in the City. It considers vehicle traffic, as well as transit, pedestrian, bicycle, truck and other modes. To understand existing travel patterns and conditions, a variety of aspects of the city's transportation system were considered. In the fall of 1996, an inventory of traffic conditions in Beaverton was undertaken to establish a base year for all subsequent analysis. Much of this data provides a benchmark (basis of comparison) for future assessment of transportation performance in Beaverton relative to desired policies.

The following sections briefly describe existing roadway functions, circulation, traffic speeds and volumes and levels of service in the Beaverton transportation system. Eighty-three study area intersections were selected in review with City of Beaverton staff to evaluate traffic conditions.

STREET NETWORK

The Transportation Planning Rule requires that classification of streets within the City be provided.¹ The classification must be consistent with state and regional transportation plans for continuity between adjacent jurisdictions. The City of Beaverton has an existing street classification system as **part** of its comprehensive plan.² The comprehensive plan has been updated several times, most recently with the Downtown Connectivity Plan in June 1997.

Functional Classification

Roadways have two functions, to provide mobility and to provide access. From a design perspective, these functions can be incompatible since high or continuous speeds are desirable for mobility, while low speeds are more desirable for land access. Arterials emphasize a high level of mobility for through movement; local facilities emphasize the land access function; and collectors offer a balance of both functions.

¹ *Transportation Planning Rule*, State of Oregon, Department of Land Conservation and Development, Section 660-12-020(2)(b), April, 1995.

² *Comprehensive Plan for the City of Beaverton*. City of Beaverton, Map adopted November 28, 1988.

The existing functional classification of streets in Beaverton is represented in the Past Plans and Policies section of the appendix. Any street not designated as either an arterial or collector is considered a local street. Some streets have dual classifications, since their current function changes over their length. Beaverton's functional classification system was reviewed as part of this project and the proposed functional classification system is discussed in Chapter 8: Motor Vehicles.

Washington County roadway classifications are generally consistent with City of Beaverton designations. The only discrepancy between the jurisdictions is Baseline Road which is currently classified as a Major Collector east of 170th Avenue by the City of Beaverton and as a Minor Arterial (interim classification) by Washington County. A table summarizing functional classification of Beaverton streets by other jurisdictions is shown in the Past Plans and Policies section appendix of the report.

ODOT and Metro only classify roads that are considered to be of statewide or regional significance, respectively. These classifications are compatible with Beaverton classifications, although the specific classification names may differ. ODOT and Metro classifications can be found in the *Roadway Functional Classification According to Jurisdiction* table in the Past Plans and Policies section of the appendix of this report. ODOT's classification only applies to the portion of roadways which are state facilities. Figure 3-1 shows the roadway jurisdiction for operating and maintenance purposes. Because of their more regional or areawide significance, the designation of arterials and collectors by ODOT, Metro and Washington County guides the City in its functional classification.

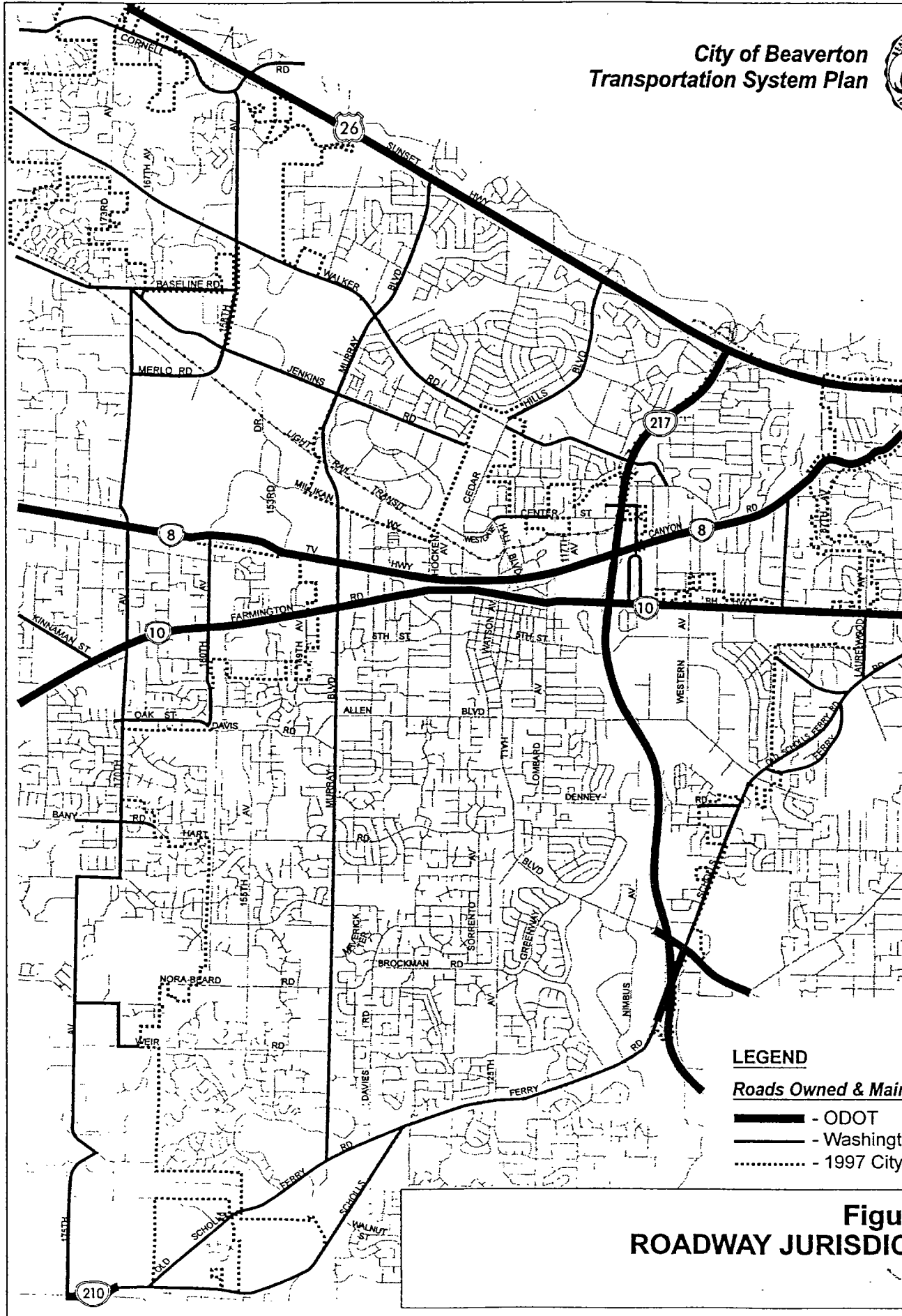
EXISTING CIRCULATION

The following sections review the performance of various key routes in Beaverton in terms of volumes, capacity, accidents, adjacent land use (including schools), intersection level of service, arterial level of service and general observations. The key routes include US 26 (Sunset Highway), ORE 217, ORE 8 (TV Highway-Canyon Road), ORE 10 (Farmington-Beaverton Hillsdale Highway), ORE 210 (Scholls Ferry), Murray Boulevard, Hall Boulevard, Allen Boulevard, Walker Road, Cedar Hills Boulevard and Jenkins Road. Each route evaluation is organized to provide a description in terms of existing functional classification, number of lanes, existing traffic volumes, accident locations and a summary of PM peak hour conditions. In the following section, the existing functional classification is noted.

Arterial Highways

Sunset Highway (**US 26**) is currently classified by ODOT as a Statewide Highway and as a freeway by adjacent jurisdictions. It serves vehicles traveling between Portland (I-405 to the east) and various destinations in western Oregon to the Oregon coast. The Sunset Highway also serves intrastate travel, in particular vehicles from the east traveling toward the Oregon coast. US 26 serves travel between cities in the Portland Metropolitan area. It is used as a commuter route between Washington County and Portland and various destinations in between. Lastly, US 26 serves some local travel which may occur within Beaverton or between Beaverton and a neighboring city such as Hillsboro or Portland.

**City of Beaverton
Transportation System Plan**



**Figure 3-1
ROADWAY JURISDICTION**

Oregon **217** (ORE 217) is currently classified by ODOT as a Statewide Highway and as a freeway by the City of Beaverton. It serves vehicles traveling between US 26 to the north, I-5 to the south and various destinations in Beaverton, Tigard and Portland. ORE 217 serves travel between cities in the Portland Metropolitan area. It is used as a commuter route between Washington County, Portland, cities south of Portland and various destinations in between. ORE 217 serves some local travel which may occur within Beaverton or between Beaverton and a neighboring city or area such as Tigard, Hillsboro, Tualatin or Portland.

Tualatin Valley (TV) Highway/Canyon Road (**ORE 8**) is currently classified by ODOT as a District Highway. TV Highway is currently classified as a Principal Arterial west of ORE 217 and as a Major Arterial east of ORE 217 by the City of Beaverton. Washington County classifies TV Highway as a principal route, and Metro classifies TV Highway as a Regional Through-Route (Arterial). TV Highway provides direct access from Beaverton to Hillsboro, Aloha, Forest Grove and Portland.

Beaverton-Hillsdale Highway/Farmington Road (**ORE 10**) is currently classified by ODOT as a District Highway and as a Major Arterial by the City of Beaverton, Washington County and Metro. Beaverton-Hillsdale Highway provides direct access from Beaverton to Portland, Hillsdale and Aloha. In Portland, Beaverton-Hillsdale Highway serves as a Major City Traffic Street (City of Portland), linking to Barbur Boulevard and a number of destinations in Portland.

Scholls Ferry Road (**ORE 210**) is currently classified by ODOT as a District Highway on the portion of Scholls Ferry Road which is a state facility. Scholls Ferry Road is currently classified as a Major Arterial west of ORE 217 and as a Minor Arterial east of ORE 217 by the City of Beaverton, Washington County and Metro. The City of Tigard classifies Scholls Ferry Road as an arterial, and the City of Portland classifies Scholls Ferry as a Major City Traffic Street. This route provides local access from ORE 217 to much of Beaverton and is used regionally as a link from ORE 217 to US 26 and destinations to both the east and the west.

Arterial Streets

Murray Boulevard is currently classified as a Major Arterial by the City of Beaverton, Washington County and Metro. Murray Boulevard provides local access from US 26 to much of Beaverton and is used regionally as a link from US 26 to **ORE 210**. Murray Boulevard is a north-south arterial in Beaverton.

Walker Road is currently classified as a Minor Arterial west of Murray Boulevard and as a Major Arterial east of Murray by the City of Beaverton and Washington County. Between Murray Boulevard and ORE 217, Washington County classifies Walker Road as a study area. Walker Road provides local access between Beaverton and Hillsboro.

Cedar Hills Boulevard is currently classified as a Minor Arterial by the City of Beaverton, Washington County and Metro. This route provides local access from US 26 to Beaverton-Hillsdale Highway. It provides access to many residential neighborhoods adjacent to it and commercial areas as well.

Hall Boulevard is currently classified as a Minor Arterial by the City of Beaverton, Washington County and Metro. East of ORE 217, ODOT classifies Hall Boulevard as a District Highway. Hall Boulevard

provides north/south and east/west circulation through Beaverton. It provides access to many local streets and residential neighborhoods adjacent to it. This roadway provides citywide access to local streets from Cedar Hills Boulevard to Scholls Ferry Road and to ORE 217. Hall Boulevard provides a connection between local streets in Beaverton to Tigard and Portland.

Allen Boulevard is currently classified as a Minor Arterial by the City of Beaverton, Washington County and Metro. This roadway connects ORE 217 to Murray Boulevard (to the west) and Scholls Ferry Road-ORE 210 (to the east). Allen Boulevard provides east/west circulation through Beaverton. It provides access to many residential neighborhoods adjacent to it.

Jenkins Road is currently classified as a Minor Arterial by the City of Beaverton, Washington County and Metro. This roadway serves local Beaverton traffic and provides direct access to Nike, Tektronix and light rail transit stations. Jenkins Road is an east-west roadway and connects Cedar Hills Boulevard to Baseline Road.

170th Avenue/Merlo/158th Avenue are currently classified as Minor Arterials by the City of Beaverton, Washington County and Metro. These roadways provide north/south circulation through Beaverton, serve local Beaverton traffic and provide direct access to light rail transit, schools and residential areas.

153rd Avenue is currently classified by the City of Beaverton and Washington County as a Minor Arterial. 153rd Avenue serves local Beaverton traffic and provides direct access to Murray West LRT station. This roadway connects Jenkins Road to TV Highway.

Denney Road is currently classified as a Minor Arterial by the City of Beaverton, Washington County and Metro. This roadway serves local Beaverton traffic, provides east/west circulation and provides direct access to ORE 217. Denney Road connects Hall Boulevard to Scholls Ferry Road (ORE 210).

Brockman/Greenway are currently classified as a Minor Arterials by Washington County and the City of Beaverton. These roadways serve local Beaverton traffic and provide access to many residential neighborhoods adjacent to it. This roadway connects Hall Boulevard to Murray Boulevard.

PAVEMENT CONDITION

The goal of the City of Beaverton's street maintenance program is "to preserve the City's street system, pedestrian pathways and bridges and assure total quality customer service in support of City Council Goals number one, two, three, four, five, seven and eight." The operations department performs preventive maintenance to the street system and responds immediately to emergency situations involving the street surface. Significant projects such as street overlays and seals are outsourced. An increased emphasis has been placed on preventative maintenance for arterial and collector streets due to damage and wear from an unusually wet winter.

Table 3-1 summarizes the street maintenance program for the City of Beaverton. Table 3-2 summarizes the street maintenance program budget.

	FY 1994-95 (Actual)	FY 1995-96 (Actual)	FY 1996-97 (Budgeted)	FY 1997-98 (Proposed)
system	miles	miles	miles	
Bridge maintenance inspections	20 bridges	20 bridges	20 bridges	20 bridges
Square yards of street repairs	13,447	13,935	13,064	13,350
Number of bridge inspections completed	20	20	20	20

**Table 3-2
Street Maintenance Budget Summary**

Requirements	FY 1994-95 (Actual)	FY 1995-96 (Actual)	FY 1996-97 (Budgeted)	FY 1997-98 (Proposed)	FY 1997-98 (Adopted)
Personal Services	\$ 450,599	\$ 417,359	\$ 452,669	\$ 470,847	\$ 470,847
Materials and Services	\$ 127,319	\$ 140,236	\$ 185,940	\$ 148,650	\$ 148,650
Capital Outlay	\$ 444,519	\$ 618,147	\$ 677,311	\$ 670,750	\$ 670,750
Transfers	\$ 373,739	\$ 280,803	\$ 332,883	\$ 445,808	\$ 445,808
Total	\$1,396,176	\$1,456,545	\$1,648,803	\$1,736,055	\$1,736,055

Note FY= Fiscal Year

TRAFFIC SPEED AND VOLUME

Speed

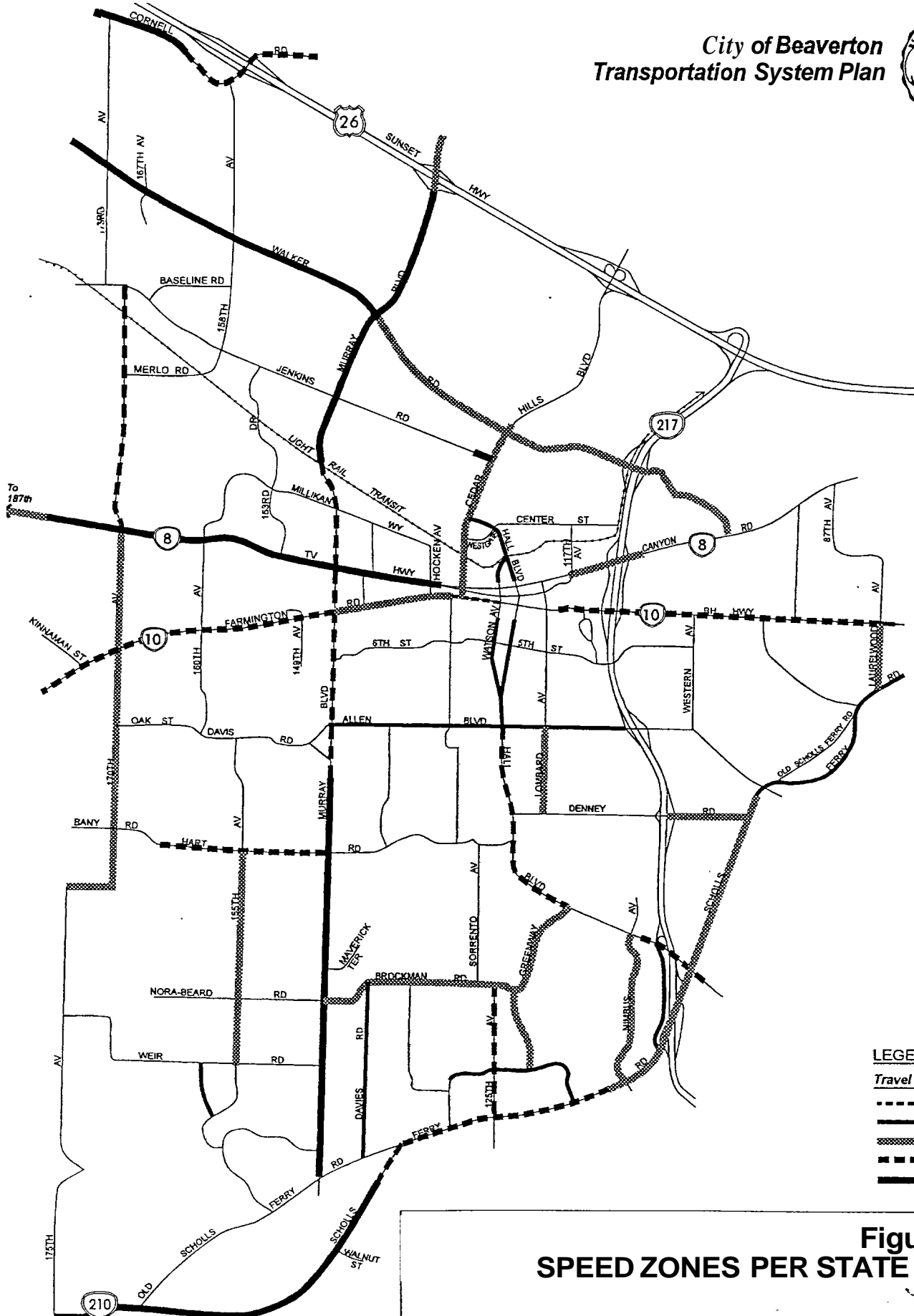
Speed zones on arterials and collectors within the City of Beaverton are summarized in Figure 3-2. Speed zones are set by Oregon's Speed Zone Review Panel. The Speed Zone Review Panel is an independent board who sets speed zones for city streets, county roads and state highways passing through cities. The Speed Zone Review Panel conducts engineering studies and considers many factors such as roadway width, surface, lanes, shoulders, signals, intersections, roadside development, parking, accidents and 85th percentile speed. A decision made by the Speed Zone Review Board is not arbitrary or political, and is based on the considerations described above.³

Vehicle speeds on several collector and residential streets are a concern for the community. Residential areas generate the most speeding complaints, and the 25 mph speed zones are violated the most in the City of Beaverton.⁴

³ *Speed Zoning: Who Decides?*, State Speed Control Board, April, 1992.

⁴ Telephone conversation with Sergeant Steve Wilson, City of Beaverton Police Department, May 6, 1997.

**City of Beaverton
Transportation System Plan**



**Figure 3-2
SPEED ZONES PER STATE FILES**

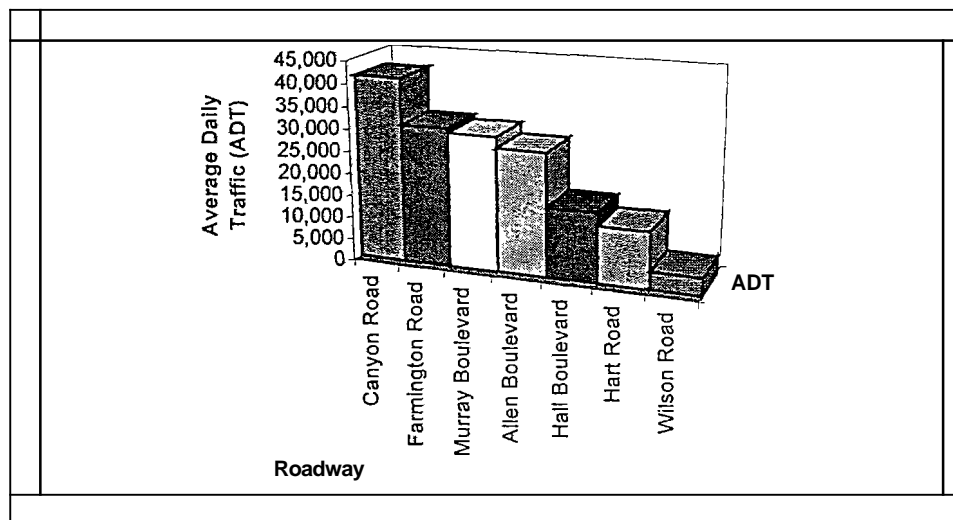
In most cases, speeding becomes very noticeable when it is above 30-35 miles per hour. Speeding can usually be expected on local streets where the streets are wide and straight for long stretches or where downhill grades are extended.

Volume

A complete inventory of peak traffic conditions was performed in the fall of 1996 as part of the Beaverton Transportation System Plan. The traffic counts conducted as part of this inventory provide the basis for analyzing existing problem areas as well as establishing a base condition for future monitoring. Turn movement counts were conducted at 83 intersections during the evening (4-6 PM) peak period to determine intersection operating conditions.

On a typical day, TV Highway is the most heavily traveled street in Beaverton. Near ORE 217, TV Highway (Canyon Road) carries about 41,300 vehicles per day (two-way). Farmington Road carries about 31,000 vehicles per day (two-way) near ORE 217, Murray Boulevard carries about 30,000 vehicles per day (two-way) near TV Highway and Allen Boulevard carries approximately 27,500 vehicles per day (two-way) near ORE 217. As a comparison, daily traffic on ORE 217 is about 109,000 vehicles per day (two-way) south of the Beaverton-Hillsdale overcrossing.⁵ Figure 3-3 shows the average daily traffic (ADT) on several routes in Beaverton. Daily and PM peak hour link volumes are shown in Figure 3-4.

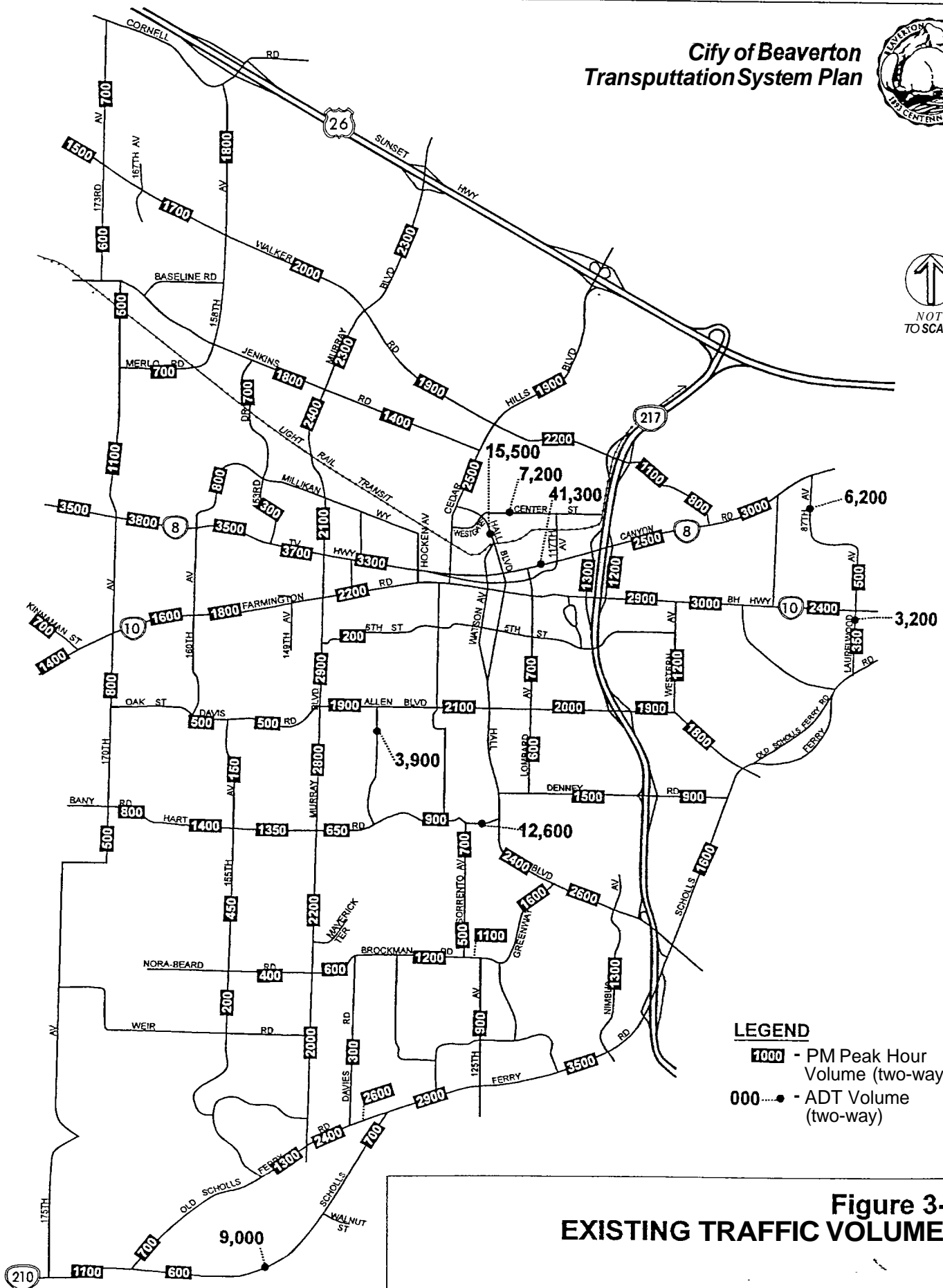
Figure 3-3
Average Daily Traffic

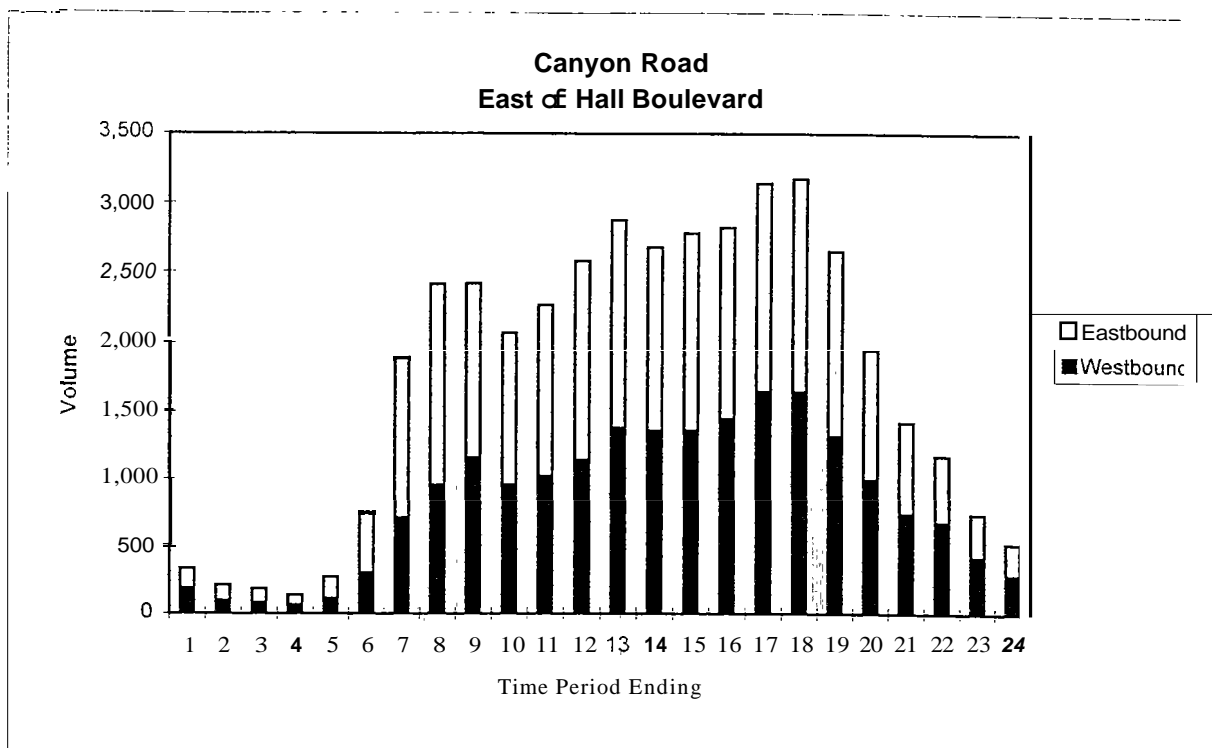


Traffic data collected over the course of this study illustrates the typical fluctuations of traffic over the course of a day. Profiles of daily traffic indicate the period when traffic is greatest (Figures 3-5 and 3-6). The evening peak period is the time when traffic volume is highest (combination of commute, retail and school activities).

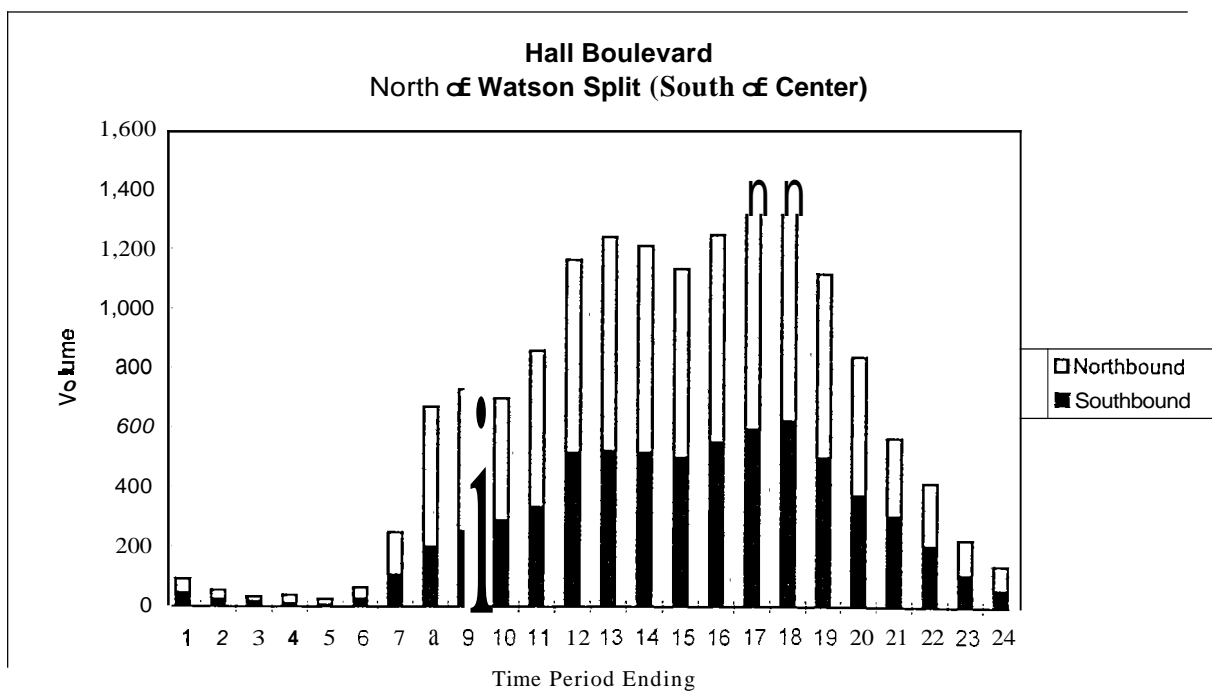
⁵ 1995 Traffic Volume Tables, Oregon Department of Transportation, Transportation Development Branch, Published May, 1996.

City of Beaverton Transportation System Plan



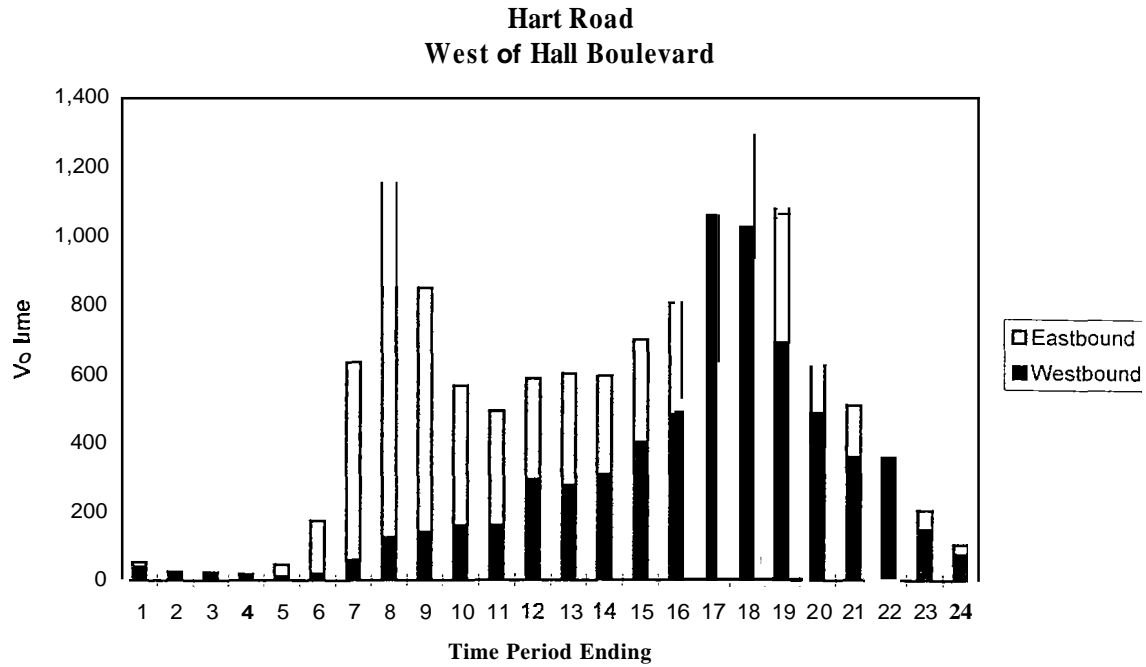


Average Daily Traffic (ADT) = 41,300

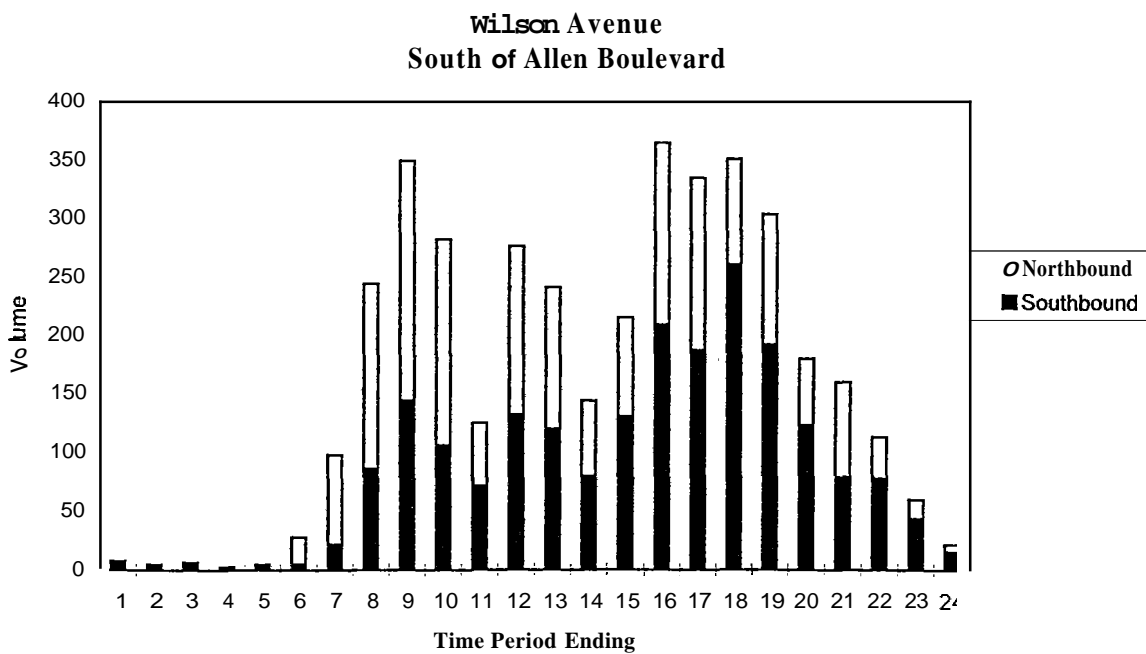


ADT = 15,500

**Figure 3-5
Hourly Variations**



ADT = 12,600



ADT = 3,900

**Figure 3-6
Hourly Variations**

TRAVEL TIME RUNS

Travel time is a key measure of transportation service and accessibility in a city. It provides a common reference for comparison between modes and a historical reference in future years. Travel time runs were conducted on several key routes in Beaverton. These travel time runs measured the length of time it took to travel from one end of Beaverton to the other on each key route during the PM peak period (4:00 PM to 6:00 PM) during the week. Four key routes were surveyed:

- Murray Boulevard from Cornell Road to Scholls Ferry Road
- Hall Boulevard/Cedar Hills Boulevard from Barnes Road to Greenburg Road
- Murray Boulevard from Cornell Road to Scholls Ferry Road
- Canyon Road/TV Highway from 87th Avenue to 185th Avenue

The time periods observed were weekday evening peak period. The results of these travel time runs are shown in Table 3-3 and Figure 3-7. In general, it is possible to get across town in Beaverton (either north/south or east/west) in approximately 12 to 18 minutes. This translates to average speeds of about 20 to 25 miles per hour, including delays at traffic signals and stop signs. Travel time along urban arterials can also be used as a measure of level of service.⁶ Compared to capacity analysis, the average travel speed can help identify congested areas.

Table 3-3
Travel Time Surveys

Route	Direction	Distance (miles)	Average Speed (mph)
Murray Boulevard (from Barnes to Scholls)	Northbound	6.3	25.4
	Southbound	6.4	24.7
Cedar Hills/Hall (from Barnes to Greenburg)	Northbound	5.7	19.8
	Southbound	5.8	19.5
TV Highway (from 91st Ave to 185th Ave)	Eastbound	4.8	17.8
	Westbound	4.8	20.5
Hart/Denney (from Scholls to 185th Avenue)	Eastbound	4.7	24.0
	Westbound	4.7	24.1
Arterial level of service D (for a class II arterial)			>14 MPH

⁶ 1994 Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 1994, Chapter 11.

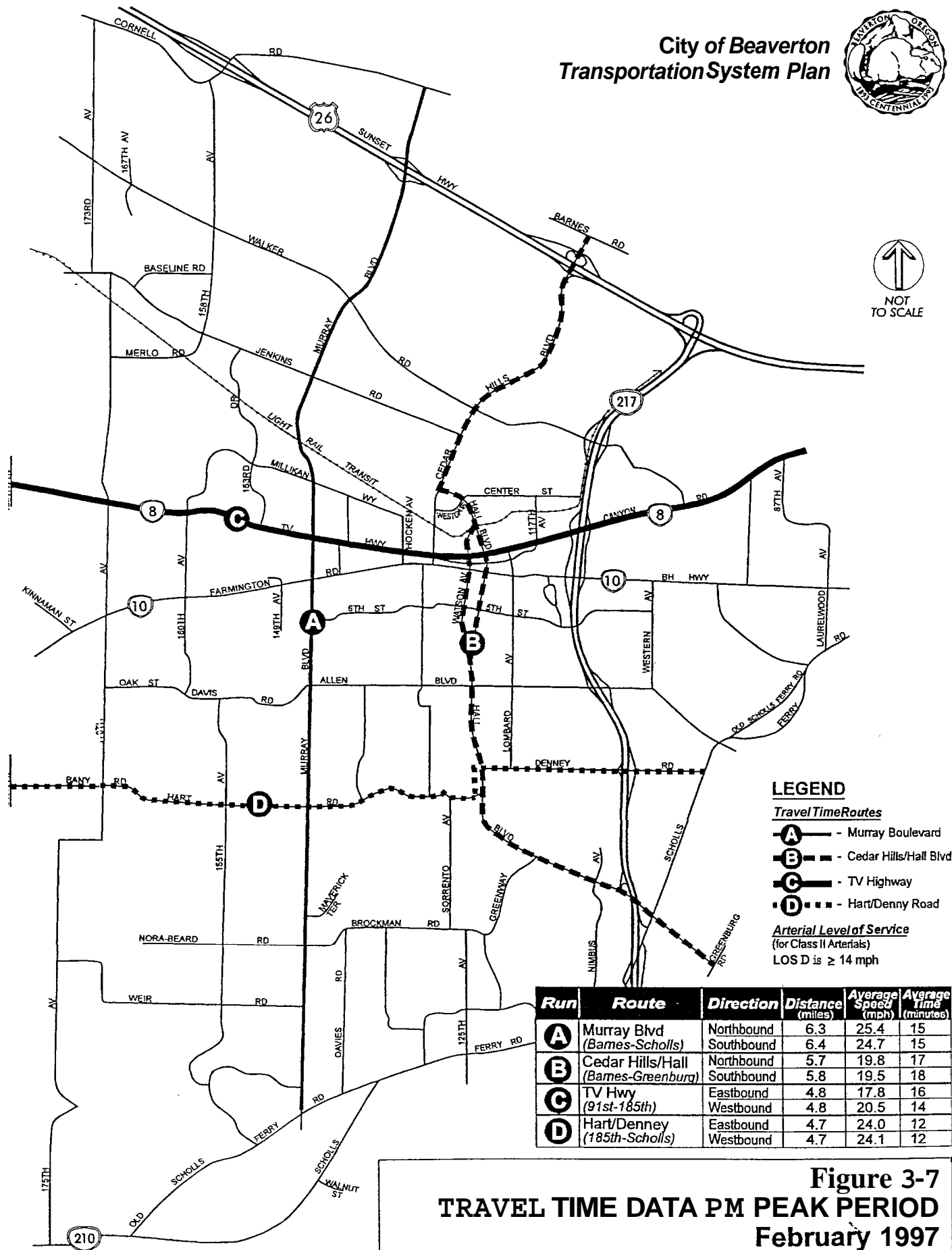


Figure 3-7
TRAVEL TIME DATA PM PEAK PERIOD
February 1997

TRAFFIC CONTROL

Beaverton has approximately 160 signalized intersections (including the Urban Growth Boundary Management Area), with the majority on arterial streets. Figure 3-8 shows the signalized locations and the jurisdiction that operates the traffic signal. Traffic signals are valuable devices for the control of vehicle and pedestrian traffic. Traffic control signals, properly located and operated, can have one or more of the following advantages:

- They provide for the orderly movement of traffic
- On larger roadways where proper physical layouts and control measures are used, they can increase the traffic handling capacity of the intersection
- They reduce the frequency of certain types of accidents, especially right angle type
- Under favorable conditions, they can be coordinated to provide continuous or nearly continuous movement of traffic at a definite speed along a given route
- They permit minor street traffic, vehicular or pedestrian, to enter or cross continuous traffic on the major street

Improper or unwarranted signal installations may cause:

- Excessive delay
- Disobedience of signal indications
- Circuitous travel of alternative routes
- Increased accident frequency, particularly rear-end type

Consequently, it is important that the consideration of a signal installation and the selection of equipment be preceded by a thorough study and based on consistent criteria. These studies identify the need for left turn phasing, lanes and phase type. The justification for the installation of a traffic signal at an intersection for ODOT, Washington County and Beaverton is based upon the warrants stated in the *Manual on Uniform Traffic Control Devices*⁷ (MUTCD). The MUTCD has been adopted by the State of Oregon and is used throughout the nation.

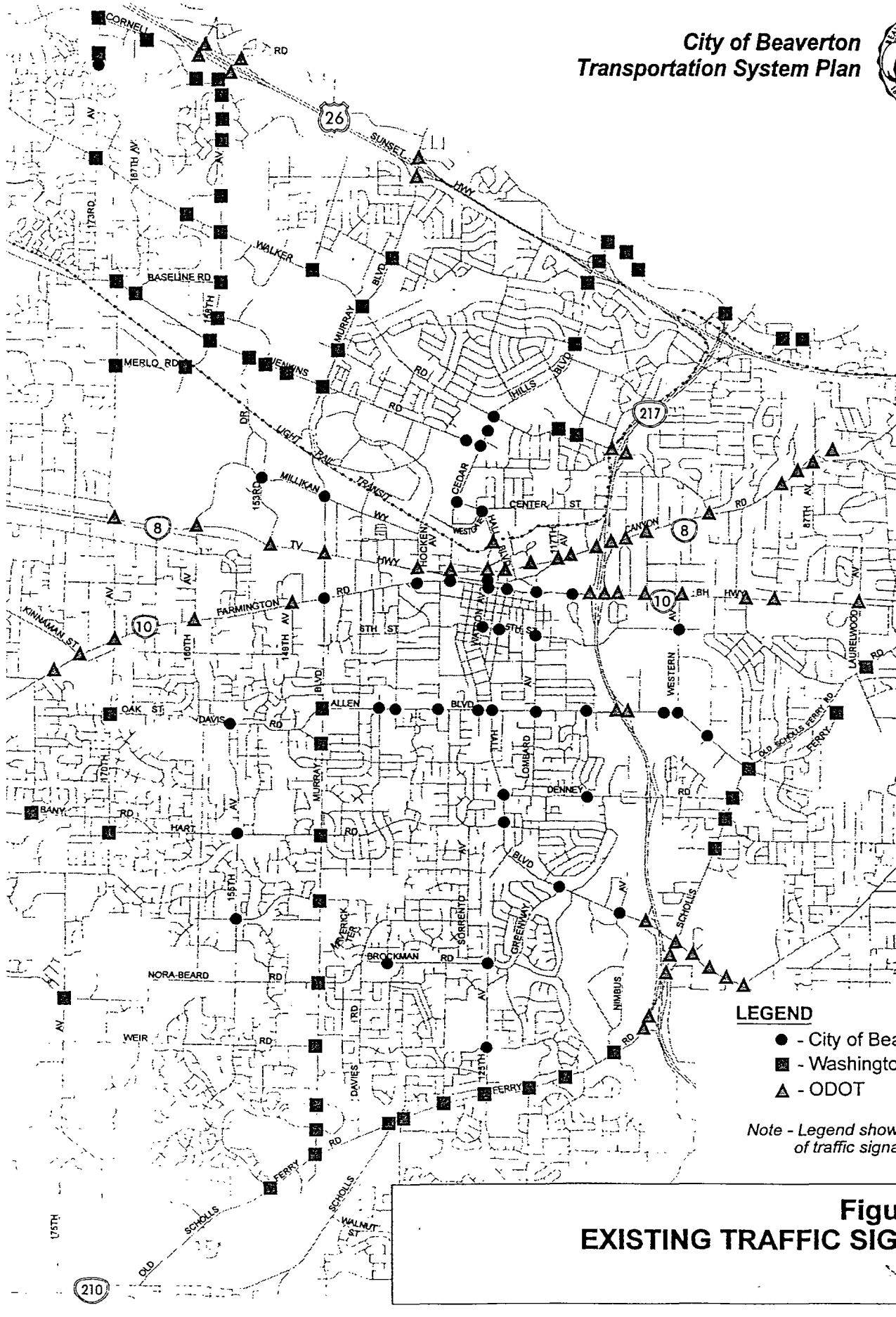
The same conditions hold true for installation of stop sign traffic controls. Specific warrants identify conditions which **may** warrant two-way or multi-way stop sign installations. A stop sign is not a cure-all and is not a substitute for other traffic control devices. Guidelines **and** warrants for stop sign installations are outlined in the MUTCD.

TRAFFIC LEVELS OF SERVICE

While analysis of traffic flows and functional classification are useful in attempting to reach an understanding of the general nature of traffic in an area, traffic volume alone indicates neither the ability of the street network to carry additional traffic nor the quality of service afforded by the street facilities. For this, the concept of *level of service* has been developed to correlate traffic volume data to subjective descriptions of traffic performance at intersections.

⁷ *Manual on Uniform Traffic Control Devices for Streets and Highways*, US Department of Transportation, Federal Highway Administration, 1988.

City of Beaverton Transportation System Plan



**Figure 3-8
EXISTING TRAFFIC SIGNALS**

Level of service (LOS) is used as a measure of effectiveness for intersection operation. It is similar to a "report card" rating based upon average vehicle delay. Level of Service A, B and C indicate conditions where traffic moves without significant delays over periods of peak travel demand. Level of service D and E are progressively worse peak hour operating conditions. Level of service F represents conditions where average vehicle delay exceeds 60 seconds per vehicle entering a signalized intersection and demand has exceeded the capacity. This condition is typically evident in long queues and delays. Level of service D or better is generally the accepted standard for signalized intersections in urban conditions. Unsignalized intersections provide levels of service for major and minor street turning movements. For this reason, LOS E and even LOS F can occur for a specific turning movement; however, the majority of traffic may not be delayed (in cases where major street traffic is not required to stop). LOS E or F conditions at unsignalized intersections generally provide a basis to study intersection further to determine availability of acceptable gaps, safety and traffic signal warrants. A summary of the descriptions of level of service for signalized and unsignalized intersections is provided in the Level of Service Descriptions section of the appendix.

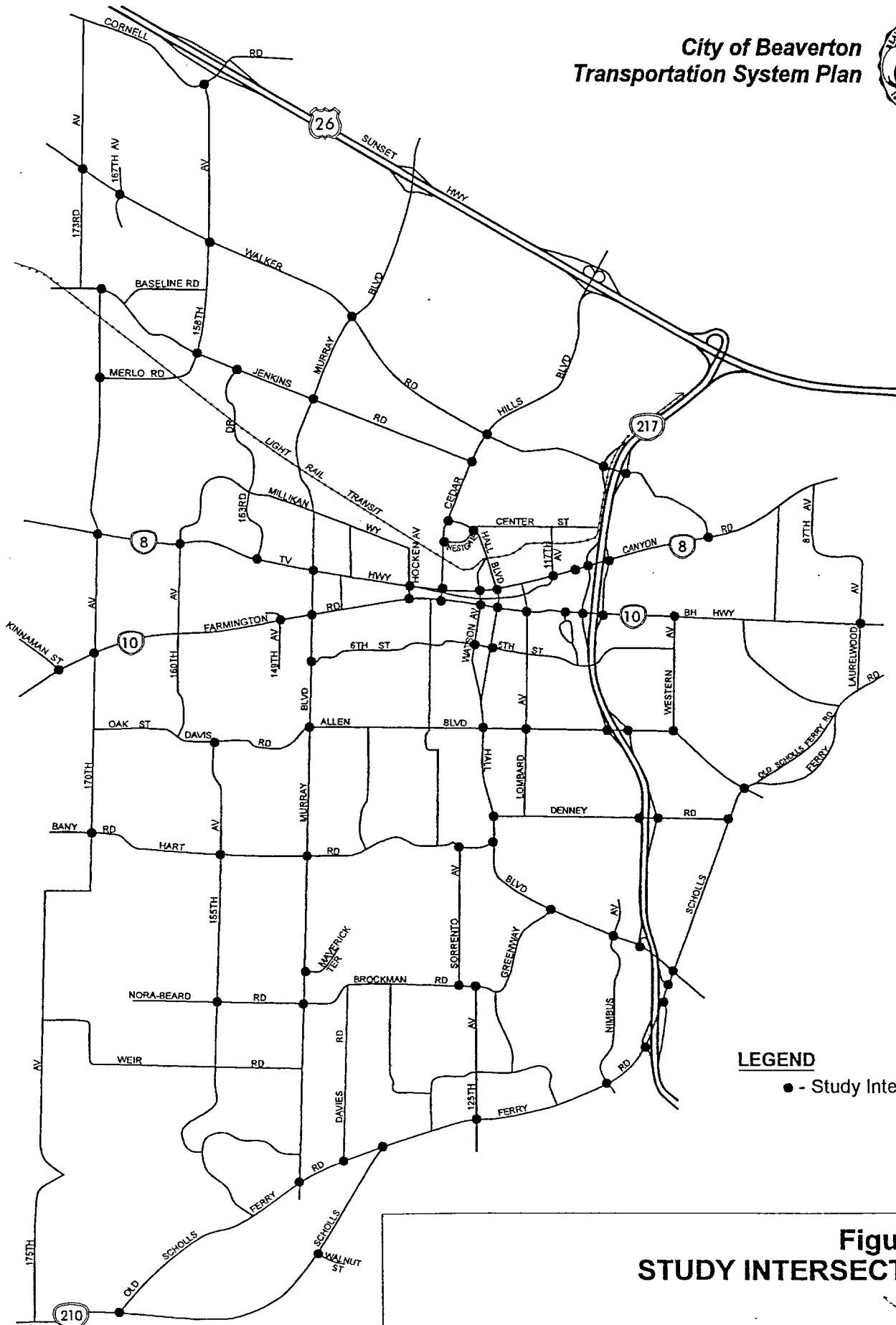
Intersection turn movement counts were conducted at the 83 study intersections shown in Figure 3-9 during the evening peak periods to determine existing LOS based on the 1994 Highway Capacity Manual methodology for signalized and unsignalized intersections.* Traffic counts and level of service calculation sheets are included in the appendix.

Tables 3-4 to 3-7 provide a summary of PM peak hour levels of service for the signalized study intersections in Beaverton. Most intersections in Beaverton operate at level of service D or better, with some exceptions.

Signalized Intersection	Level of Service	Average Delay	Volume/Capacity
Denney Road/Scholls Ferry Road	C	19.1	0.87
Allen Boulevard/Scholls Ferry Road	D	35.7	0.92
Scholls Ferry Road/Hall Boulevard	D	38.4	0.95
Scholls Ferry Road/125 th Avenue	D	29.3	0.96
Scholls Ferry Road/Nimbus	D	32.9	0.99
Murray Boulevard/Old Scholls Ferry Road	C	19.7	0.80
Scholls Ferry Road/Old Scholls Ferry Road (east)	B	9.6	0.59
Scholls Ferry Road/ORE 217 SB ramps	D	32.3	0.94
Scholls Ferry Road/ORE 217 NB off-ramp	C	21.0	0.88
Scholls Ferry Road/ORE 217 NB on-ramp	C	19.2	0.72

⁸ Highway Capacity Manual. Special Report 209, Transportation Research Board, Washington D.C., 1994.

City of Beaverton Transportation System Plan



**Figure 3-9
STUDY INTERSECTIONS**

Table 3-5
Existing PM Peak Hour Intersection Level of Service
Signalized Study Intersections Along TV Highway/Canyon Road

Signalized Intersection	Level of Service	Average	Volume/Capacity
Canyon Road/Broadway-117 th Avenue	C	18.1	0.84
Canyon Road/ORE 217 SB ramps	C	17.2	0.80
Canyon Road/ORE 217 NB ramps	C	17.8	0.78
Canyon Road/Hall Boulevard	C	17.1	0.82
Canyon Road/Watson Avenue	B	13.9	0.82
TV Highway/Hocken Avenue	D	34.8	0.98
TV Highway/Murray Boulevard	E	42.1	0.99
Canyon Road/Cedar Hills Boulevard	D	38.5	0.99
Canyon Road/Fred Meyer Access	C	18.1	0.75
TV Highway/153 rd Drive	B	6.1	0.77
TV Highway/160 th Avenue-Millikan Way	D	27.7	0.94
TV Highway/170 th Avenue	D	36.9	0.99
Canyon Road/Walker Road	C	15.7	0.77

Table 3-6
Existing PM Peak Hour Intersection Level of Service
Signalized Study Intersections Along Farmington Road/Beaverton-Hillsdale Highway

Signalized Intersection	Level of Service	Average	Volume/Capacity
Murray Boulevard/Farmington Road	E	50.2	0.99
Farmington Road/Watson Avenue	C	18.7	0.84
Farmington Road/Hall Boulevard	C	18.7	0.88
Farmington Road/Lombard Avenue	C	20.2	0.82
Beaverton-Hillsdale Highway/ORE 217 SB ramps	C	20.3	0.88
Beaverton-Hillsdale Highway/Griffith Drive	B	14.5	0.78
Beaverton-Hillsdale Highway/ORE 217 NB ramps	C	22.0	0.92
Farmington Road/Hocken Avenue	C	17.3	0.91
Farmington Road/Cedar Hills Boulevard	C	16.8	0.88
Farmington Road/149 th Avenue	B	7.3	0.81
Farmington Road/170 th Avenue	D	31.1	0.92
Kinnaman/Farmington	D	25.8	0.99
Beaverton-Hillsdale Highway/Western Avenue	D	28.7	0.97
Laurelwood Avenue/Beaverton-Hillsdale Highway	B	11.9	0.71

Table 3-7
Existing PM Peak Hour Intersection Level of Service
Signalized Study Intersections

Signalized Intersection	Level of Service	Average	Volume/Capacity
Murray Boulevard/Allen Boulevard	D	26.3	0.88
Hall Boulevard/Allen Boulevard	D	30.3	0.87
Allen Boulevard/Lombard Avenue	C	21.4	0.71
Watson Avenue/5th Street	B	6.5	0.52
Hall Boulevard/5th Avenue	B	8.5	0.67
Allen Boulevard/ORE 217 NB ramps	C	18.2	0.77
Allen Boulevard/ORE 217 SB ramps	C	20.7	0.80
Hall Boulevard/Westgate-Center	C	15.1	0.50
Murray Boulevard/Jenkins Road	D	32.9	0.91
Walker Road/ORE 217 NB ramps	D	35.3	0.99
Walker Road/ORE 217 SB ramps	B	14.0	0.87
Cedar Hills Boulevard/Hall Boulevard	C	22.3	0.81
Cedar Hills Boulevard/Walker Road	D	35.1	0.96
Cedar Hills Boulevard/Jenkins Road	D	25.6	0.89
Cedar Hills Boulevard/Westgate Drive	B	6.4	0.42
Jenkins Road/153rd Drive	C	20.5	0.89
Jenkins Road/158th Avenue	D	30.0	0.91
Merlo Road/170th Avenue	C	16.5	0.73
Baseline Road/170th Avenue	B	10.0	0.44
Walker Road/158th Avenue	D	29.1	0.86
Walker Road/173rd Avenue	C	22.9	0.80
Cornell Road/158th Avenue	C	16.2	0.76
Walker Road/Murray Boulevard	E	40.1	0.93
Allen Boulevard/Western Avenue	C	19.6	0.97
Hall Boulevard/Denney Road	C	17.4	0.83
Hall Boulevard/Hart Road	B	13.3	0.71
Murray Boulevard/Hart Road	D	25.5	0.91
Hart Road/155th Avenue	C	18.1	0.95
Murray Boulevard/Brockman Road	B	14.7	0.55
Brockman Road/125th Avenue	C	23.3	0.95
Hall Boulevard/Greenway	D	33.3	0.99
Hall Boulevard/Nimbus Avenue	D	40.0	0.92
Hall/ORE 217 SB	D	32.2	0.94

Tables 3-8 and 3-9 summarize the capacity analysis for evening peak conditions at ten unsignalized intersections and three all-way-stop controlled intersections in Beaverton. These 13 additional intersections, combined with the signalized intersections mentioned above, represent the 83 key study intersections identified by City staff for analysis in this study.⁹ Unsignalized intersections are subject to a separate capacity analysis methodology. Descriptions of level of service for unsignalized and all-way-stop controlled intersections can be found in the technical appendix of this report.

Table 3-8
Existing PM Peak Hour Intersection Level of Service
Unsignalized Study Intersections

Intersection	Level of Service*	Average Delay (sec)
Murray Boulevard/6 th Avenue	D/F	>60.0
Walker Road/167 th Avenue	B/F	0.8
Davis Road/155 th Avenue	A/B	0.6
Denney Road/ORE 217 SB ramps	B/F	4.9
Denney Road/ORE 217 NB ramps	B/F	>60.0
Brockman Road/Sorrento Avenue	B/F	6.4
Murray Boulevard/Maverick Terrace	B/E	0.3
Old Scholls Ferry Road/Davies Road	C/F	> 60.0
Scholls Ferry Road/Old Scholls Ferry (west)	A/C	3.8
Scholls Ferry Road/Walnut Street	A/B	3.3

Level of service shown is for major street left turn/minor street left turn

Intersection	Level of Service	Average Delay	Volume/Capacity
Hart Road/ 170th Avenue	D	26.4	0.99
Hart Road /Sorrento	C	17.0	0.81
155 th /Nora-Beard (Brockman)	A	3.2	0.42

⁹ Per Howard Roll, City of Beaverton staff, November 1996.

ACCIDENTS

Accident data was obtained from the City of Beaverton and Washington County. The City of Beaverton ten highest accident locations for 1994 to 1996 are shown in Figure 3-10 and summarized in Table 3-10.

Table 3-10
Ten Highest Accident Locations in Beaverton (1994 to 1996)

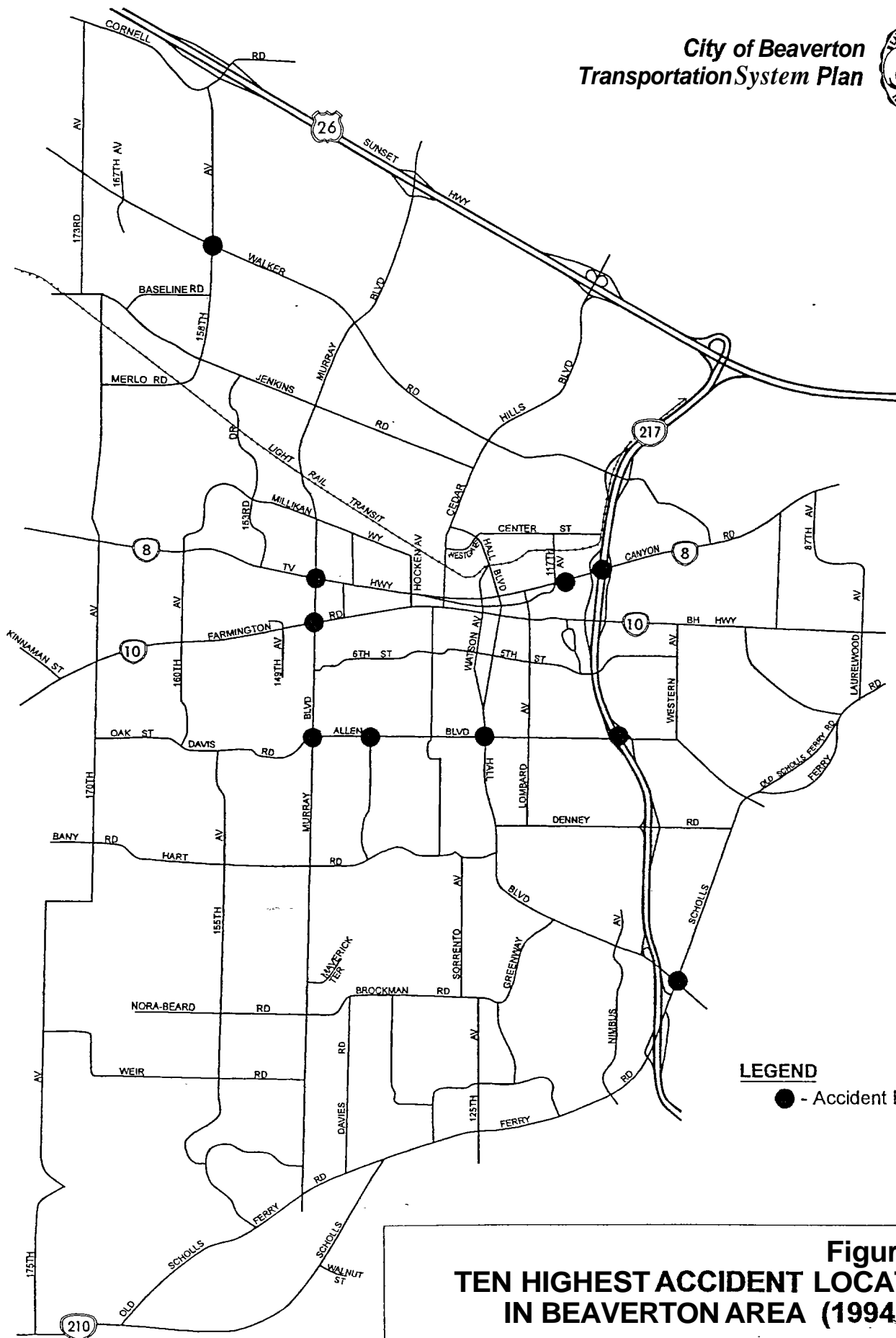
Rank	Location	Number of Accidents
1	SW Murray Boulevard/SW TV Highway	71
2	SW 158 th Avenue/SW Walker Road	56
3	SW Farmington Road/SW Murray Boulevard	48
4	SW Allen Boulevard/SW Murray Boulevard	47
5	SW Hall Boulevard/SW Scholls Ferry Road	40
6	Highway 217/SW Allen Boulevard	36
7	SW Allen Boulevard/SW Menlo Drive	34
8	SW Allen Boulevard/SW Hall Boulevard	29
9	Highway 217/SW Canyon Road	29
10	11635 SW Canyon Road	26

Accident data was obtained from Washington County for the period from 1992 to 1994. This data is collected by the State of Oregon and converted to a Safety Priority Index System (SPIS) number. The SPIS number associated with a given intersection represents only those accidents that took place within or very near that intersection. The SPIS system of accident reporting does not necessarily identify broad areas or roadway links (i.e., a one-half mile segment) where a number of accidents may take place.

The SPIS numbers for each intersection in the Beaverton area of Washington County where accidents have occurred were then ranked from highest (most severe accident location) to lowest (least severe accident location). Table 3-11 summarizes where the ten highest intersections in Beaverton fell in the Washington County ranking.

Ranking	Street	Cross Street	Number of Accidents (1992-1994)	SPIS Number
23	SW Marlow Avenue	SW Park Way	13	56.14
32	NW Butner Road	SW Cedar Hills Blvd	24	53.97
44	SW Birchwood Road	SW 87 th Avenue	3	50.74
46	SW Murray Boulevard	SW Walker Road	34	50.21
59	SW Butner-Parkway link	SW Parkway	6	47.87
64	SW Park Way	SW Parkwood Drive	5	47.15
70	SW Reusser Road	SW Rigert Road	4	45.64
74	SW Scholls Ferry Hwy	SW Old Scholls Ferry Rd	8	44.56
76	SW Cedar Hills Boulevard	SW Park Way	17	44.27
77	SW Butner Road	SW 126 th Avenue	3	44.14

**City of Beaverton
Transportation System Plan**



**Figure 3-10
TEN HIGHEST ACCIDENT LOCATIONS
IN BEAVERTON AREA (1994-1996)**

AVERAGE VEHICLE OCCUPANCY

Average vehicle occupancy is a measure of the movement of people on key routes. For Beaverton, the locations of Canyon Road near Lombard Avenue and Hall Boulevard near Allen Boulevard were selected as representative monitoring points for Beaverton vehicle activity. Average vehicle occupancy (AVO) was measured at Canyon Road near Lombard Avenue in Beaverton during the PM peak period (4:00 PM to 6:00 PM)¹⁰ to be **1.25** persons per vehicle, during the AM peak period (7:00 AM to 9:00 AM) to be **1.12** persons per vehicle and during the Saturday midday peak to be **1.62** persons per vehicle. Average vehicle occupancy was measured at Hall Boulevard during the AM peak hour to be **1.14** and during the PM peak hour to be **1.30**. This rate is slightly lower than observed typical ranges for auto occupancy (over all time periods and trip purposes) which range from about 1.31 to 1.54.¹¹

Figure 3-11 shows the percentage of vehicles with one, two or greater than two occupants at the survey site.

TRANSIT

Transit service is provided to Beaverton by the Tri-County Metropolitan Transportation District of Oregon (Tri-Met). There are currently twenty Tri-Met bus routes which serve Beaverton (as of June 1997): East/West Burnside Route 20, Taylors Ferry Road Route 43, Garden Home Route 45, Farmington-185th Route 52, Beaverton-Hillsdale Route 54, Hamilton Route 55, Scholls Ferry Road Route 56, Forest Grove Route 57, Cedar Hills Route 59, Leahy Road Route 60, Marquam Hill Beaverton Route 61X, Murray Boulevard Route 62, Beaverton-Cedar Hill Route 67, Tigard-Tualatin Route 76, Beaverton-Lake Oswego Route 78, SW 198th Avenue Route 88, Rock Creek Route 89, TV Highway Express 91X, South Beaverton Express 92X and Walker Road Express 94X (see Figure 3-12). Table 3-12 provides the service days for the Tri-Met routes serving Beaverton. Table 3-13 provides the number of transit routes for the routes providing service only during the peak hours.¹²

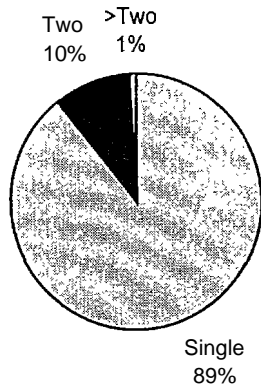
Weekday All Day Tri-Met Routes	Weekday Peak Only Tri-Met Routes	Saturday Tri-Met Routes	Sunday Tri-Met Routes
20, 43, 45, 52, 54, 56, 57, 59, 62, 67, 76, 78, 88, 89	55, 60, 61X, 91X, 92X, 94X	20, 43, 45, 52, 54, 56, 57, 59, 62, 67, 76, 78	20, 43, 45, 52, 54, 56, 57, 67, 76, 78

¹⁰ Counts performed for DKS Associates on November 19, 21, 23 and December 3-5, 1996.

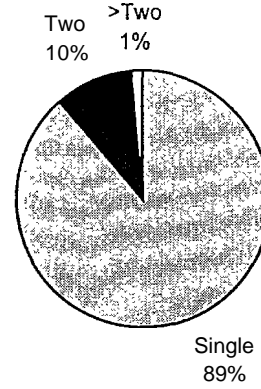
¹¹ *Calibration and Adjustment & System Planning Models*, U.S. Department of Transportation and Federal Highway Administration, December, 1990 and *Quick Response Urban Travel Estimation Techniques and Transferable Parameters: User's Guide*, NCHRB Report 187, Transportation Research Board, Washington D.C., 1978.

¹² ~~Data~~ provided by Dennis Grimmer, Tri-Met staff, March 6, 1997.

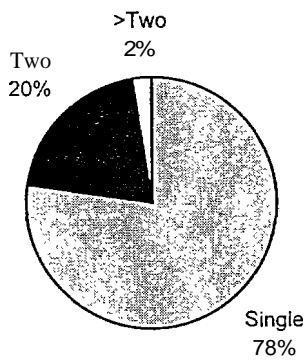
Canyon Road (west of 117th Ave)
Weekday AM AVO = 1.12



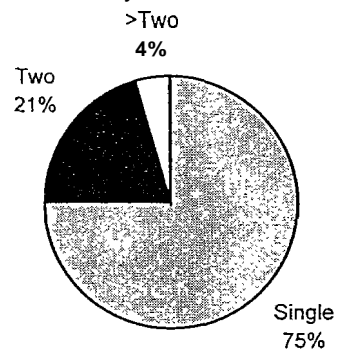
Hall Boulevard (south of Allen)
Weekday AM AVO = 1.14



Canyon Road (west of 117th Ave)
Weekday PM AVO = 1.25



Hall Boulevard (south of Allen)
Weekday PM AVO = 1.30



Canyon Road (west of 117th Ave)
Saturday AVO = 1.62

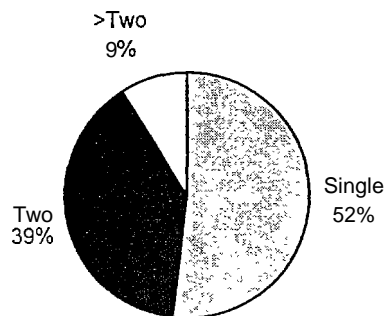


Figure 3-11
Average Vehicle Occupancy (AVO) in Beaverton

City of Beaverton Transportation System Plan

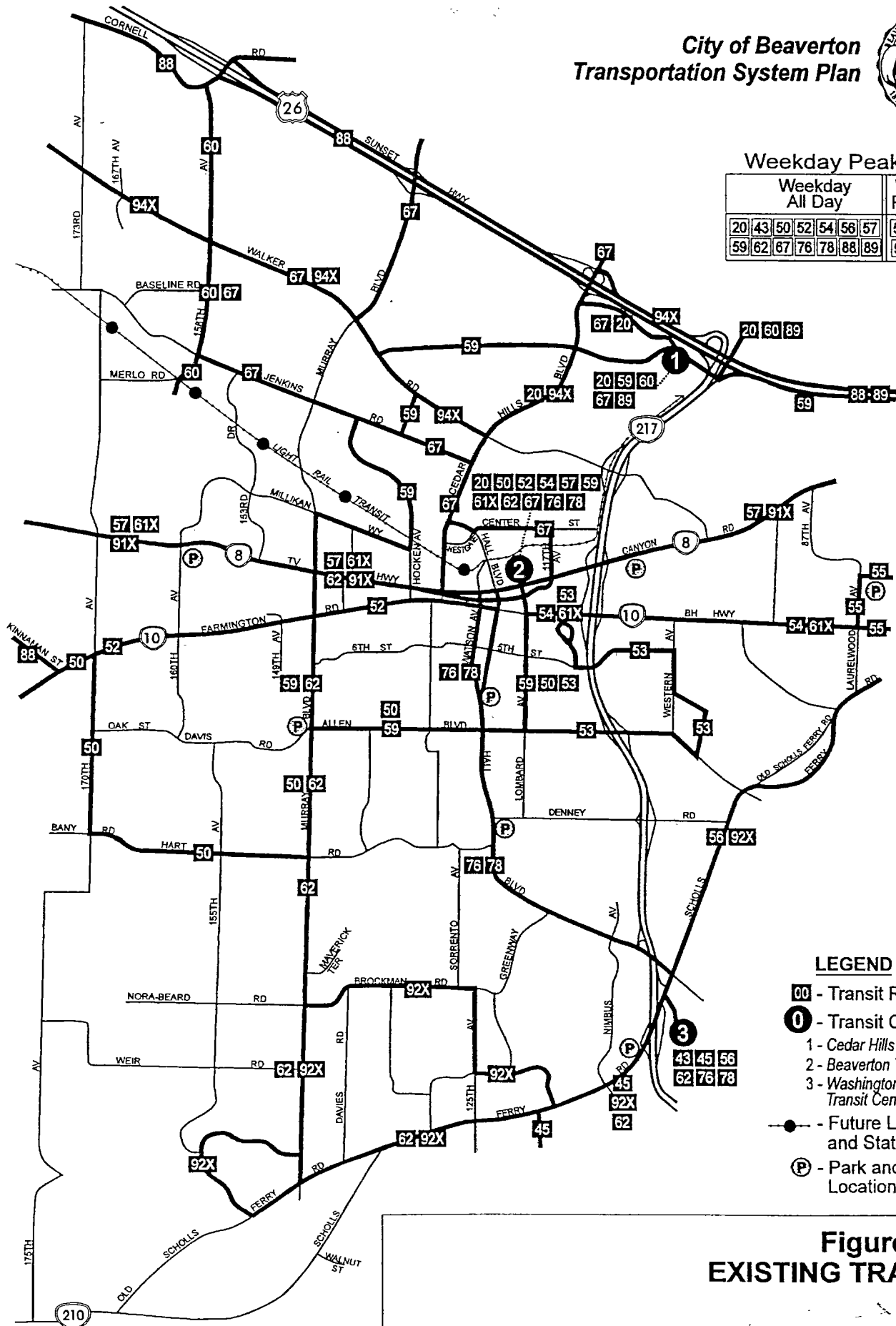


Weekday Peak

Weekday All Day								Weekday Peak Only			
20	43	50	52	54	56	57		53	55	60	61x
59	62	67	76	78	88	89		91x	92x	94x	



NOT TO SCALE



LEGEND

- 00** - Transit Route No.
- 0** - Transit Center
 - 1 - Cedar Hills Transit Center
 - 2 - Beaverton Transit Center
 - 3 - Washington Square Transit Center
- - Future LRT Route and Station
- P** - Park and Ride Lot Location

**Figure 3-12
EXISTING TRANSIT**

Table 3-13

Transit Routes Providing Service **Only** during the Peak **Hours** in Beaverton

Peak Hour Only Tri-Met Routes	Number of AM peak trips	Number of PM peak trips
Route 55 - Hamilton	7	7
Route 60 - Leahy Road	3	4
Route 61X - Marquam Hill-Beaverton	4	4
Route 91X - TV Highway Express	5	5
Route 92X - South Beaverton Express	12	11
Route 94X - Walker Road Express	10	10

Route 20, East/West Burnside Route, provides service between Cedar Hills Boulevard, the Beaverton Transit Center, Cedar Hills Transit Center and Burnside Road in Portland. Route 52, Farmington-185th Route, provides service between 185th Avenue and Beaverton Transit Center, via Farmington Road. Route 54, Beaverton-Hillsdale Highway, provides service between the Beaverton Transit Center and Portland via Beaverton-Hillsdale Highway and Barbur Boulevard. Route 56, Scholls Ferry Road, provides service between the Washington Square Transit Center and Portland via Beaverton-Hillsdale Highway and Barbur Boulevard. Route 55, Hamilton, provides weekday peak hour service from Beaverton-Hillsdale Highway at Laurelwood to Portland. Route 59, Cedar Hills, provides service between the Beaverton Transit Center and the Cedar Hills Transit Center and to Portland. Route 60, Leahy Road, provides service between the Merlo Garage, Cedar Hills Transit Center and St. Vincent Hospital. Route 62, Murray Boulevard provides service from the Beaverton Transit Center to Washington Square via TV Highway, Murray Boulevard and Scholls Ferry Road. Route 67, Beaverton Cedar Hills, provides service between the Cedar Hills Transit Center, Merlo Garage and Beaverton Transit Center. Route 76, Beaverton Tualatin, provides service between the Beaverton Transit Center, Washington Square, the Tualatin Park and Ride and Meridian Park Hospital. Route 78, Beaverton-Lake Oswego Route provides service between the Beaverton Transit Center, Washington Square, Tigard Transit Center, Portland Community College and Lake Oswego Transit Center.

The 1994 average weekday ridership in Beaverton is provided in Table 3-14.¹³ The average weekday boarding rides system-wide for Tri-Met routes serving Beaverton for the last three years is shown in Table 3-15.¹⁴

The City provides input regarding service planning individually to Tri-Met through Tri-Met's Senior, Service Planner responsible for this area and regionally through Washington County. Several meetings were held involving public input to Tri-Met during the transit sessions called Transit Choices for Livability in which Beaverton gave Tri-Met perspectives to improving the transit system.

¹³ Data provided by Dennis Grimmer, Tri-Met staff, November 5, 1996.

¹⁴ Ibid.

Table 3-14
1994 Tri-Met Weekday Ridership in Beaverton

Route	Direction	Boardings	Alightings	Total
20 - Burnside	Westbound	182	461	643
20 - Burnside	Eastbound	420	153	573
52 - Farmington/185 th	Westbound	592	270	862
52 - Farmington/185 th	Eastbound	193	503	696
54 - Beaverton-Hillsdale	Outbound	187	660	847
54 - Beaverton-Hillsdale	Inbound	639	194	833
56 - Scholls Ferry	Outbound	44	467	511
56 - Scholls Ferry	Inbound	401	99	500
57 - Forest Grove	Outbound	1138	1507	2645
57 - Forest Grove	Inbound	1655	1086	2741
59 - Cedar Hills	Outbound	671	752	1423
59 - Cedar Hills	Inbound	628	522	1150
60 - Leahy Road	Outbound	6	44	50
60 - Leahy Road	Inbound	36	2	38
62 - Murray Boulevard	Southbound	317	329	646
62 - Murray Boulevard	Northbound	357	347	704
67 - Beaverton-Cedar Hills	Southbound	594	589	1183
67 - Beaverton-Cedar Hills	Northbound	516	554	1070
78 - Beaverton-Lake Oswego	Southbound	941	533	1474
78 - Beaverton-Lake Oswego	Northbound	508	929	1437
91X - TV Highway Express	Outbound	10	263	273
91X - TV Highway Express	Inbound	302	7	309
92X - South Beaverton Express	Outbound	11	223	234
92X - South Beaverton Express	Inbound	252	3	255
94X - Walker Road Express	Outbound	7	186	193
94X - Walker Road Express	Inbound	181	5	186

Source: Tri-Met

Route	93-94	94-95	95-96
20 East/West Burnside	4,736	6,121	6,385
52 Farmington-185 th	1,582	1,781	1,911
54 Beaverton-Hillsdale	2,203	2,395	2,421
56 Scholls Ferry Road	1,908	2,174	2,256
57 Forest Grove	7,389	8,615	8,525
59 Cedar Hills	1,709	1,716	1,664
60 Leahy Road	141	117	115
62 Murray Boulevard	675	786	791
67 Beaverton-Cedar Hill	1,143	1,324	1,062
76 Tigard-Tualatin	404	610	697
78 Beaverton-Lake Oswego	2,131	2,823	3,190
91X TV HWY Express	786	890	975
92X South Beaverton Express	n/a	608	691
94X Walker Road Express	n/a	441	n/a

The City of Beaverton Development Code¹⁵ defines a *Major Transit Stop* for existing or planned light rail stations, park and ride lots, and transit transfer stations, except for temporary facilities which are within ¼ mile of intense development or uses which are likely to generate a high level of transit trips. ¹⁶Currently, there are several locations in Beaverton that may meet that criteria including the Cedar Hills Transit Center, Beaverton Transit Center and Washington Square. The City of Beaverton Development Code defines *At a major transit stop* as a parcel that is adjacent to or includes a major transit stop or is located within 200 feet of a major transit stop and defines *Near a major transit stop* as a parcel that is within 300 feet of a major transit stop.

¹⁵ City of Beaverton Development Code, Ordinance 3965, City of Beaverton, Oregon, November 7, 1996.

¹⁶ The City of Beaverton Development Code defines a *Major Transit Stop* as either A) Existing or planned light rail stations, park and ride lots, and transit transfer stations, except for temporary facilities, identified in an acknowledged transportation system plan; or B) Existing stops or other planned stops designated as major transit stops in an acknowledged transportation system plan which have 20 minute service during the weekday commute peak hour and are located within ¼ mile of an area planned and zoned for R-1, R-2, R-3.5 or other residential zoning of comparable densities or zoned for NS, GC, CS, TC, CV and OC.

As of September 1997, Tri-Met added two new bus routes within Beaverton. The buses serving these routes are smaller, neighborhood-sized vehicles. The 50-Hart/170th route links the Aloha Town Center area with the Beaverton Transit Center via 170th, Hart, Murray, Allen and Lombard. The 53-Artic/Allen links the industrial area on Allen Boulevard east of ORE 217 with the Beaverton Transit Center.

BICYCLE

Existing bike lanes, designated bikeways and off-street bike pathways are shown in Figure 3-13. Designated bikeways are those facilities that are as shown in the City of Beaverton Bikeway Plan.¹⁷ The designated bikeway facilities may or may not have future bike lanes.

There is limited connectivity for bicyclists traveling to activity centers in Beaverton. However, there are two primary north/south routes (Murray Boulevard and Hall Boulevard between Washington Square and Farmington Road) and three primary east/west routes (Scholls Ferry Road, Brockman Road and 5th Street) in Beaverton.

Bicycles are permitted on all roadways in the City except for the ORE 217 freeway. Bicycle use in Beaverton is generally for recreational, school and commuting purposes. The City includes lands owned and maintained by the Tualatin Hills Park and Recreation District which provides several off-street bike paths in Beaverton for bicyclists and pedestrians. The Tualatin Hills Park and Recreation District has completed a master plan which includes **many** proposed trails in Beaverton.

PEDESTRIANS

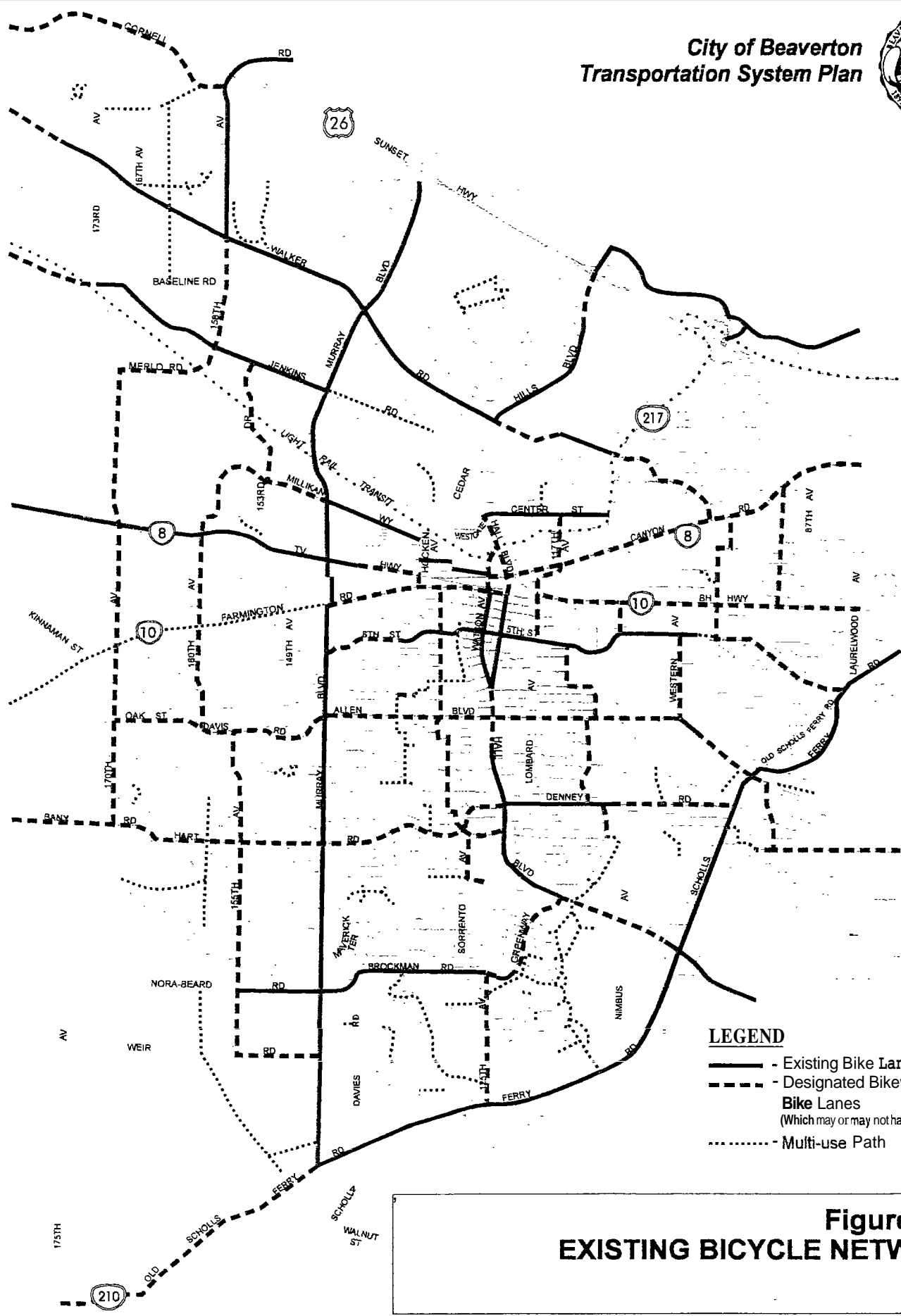
Figure 3-14 shows existing sidewalks on arterial and collector streets in Beaverton. A majority of arterial and collector streets in Beaverton have sidewalks on at least one side of the street. There are some locations where sidewalks are not connected; however, connectivity and pedestrian linkages are relatively good. In addition, besides the facilities that are shown on this map, many residential streets also have sidewalks.

Pedestrian counts were conducted during the evening peak period (4:00 to 6:00 PM) at the study intersections in Beaverton. A majority of these intersections had ten or more pedestrians in the PM peak period. The most significant pedestrian movements occur in the Beaverton downtown area on TV Highway, Cedar Hills Boulevard, Farmington Road and Hall Boulevard. Figure 3-15 shows the pedestrian movements at each study intersection during the PM peak period.

Sidewalks at least five feet wide are required in all new development. Existing roadways that do not have sidewalks are being retrofitted where terrain and right-of-way make it economically feasible to do so. All newly-constructed sidewalks include wheelchair ramps at intersections to permit easy ingress/egress for wheelchairs. In addition to paved sidewalks, pedestrian paths are included in many of the City's parks, open spaces and greenways, including the Tualatin Hills Park and Recreation District pathways.

¹⁷ *Bikeway Plan, City of Beaverton, Oregon, July 28, 1987.*

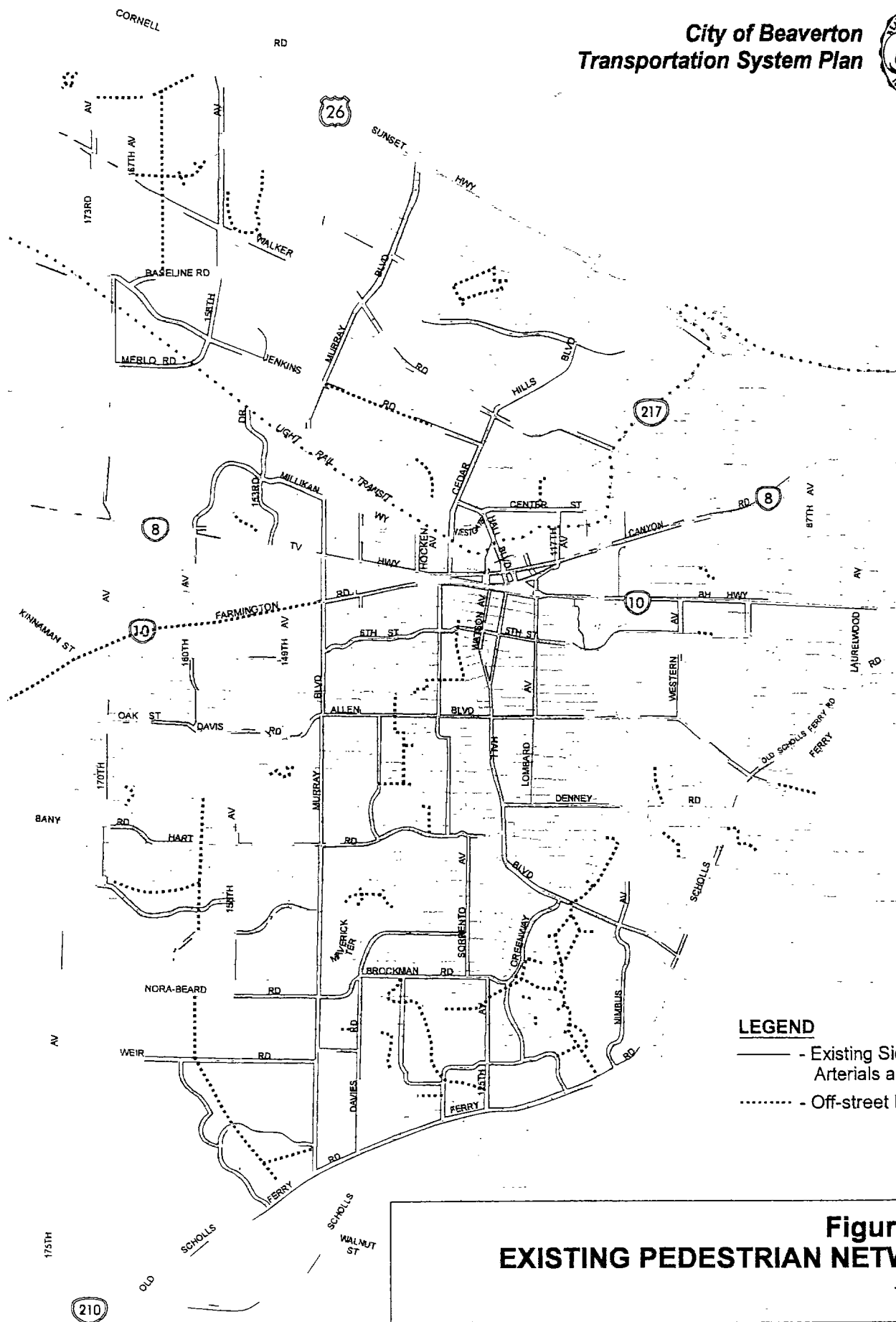
City of Beaverton
Transportation System Plan



- LEGEND**
- Existing Bike Lanes
 - - - Designated Bikeway without Bike Lanes
(Which may or may not have future bike lanes)
 - Multi-use Path

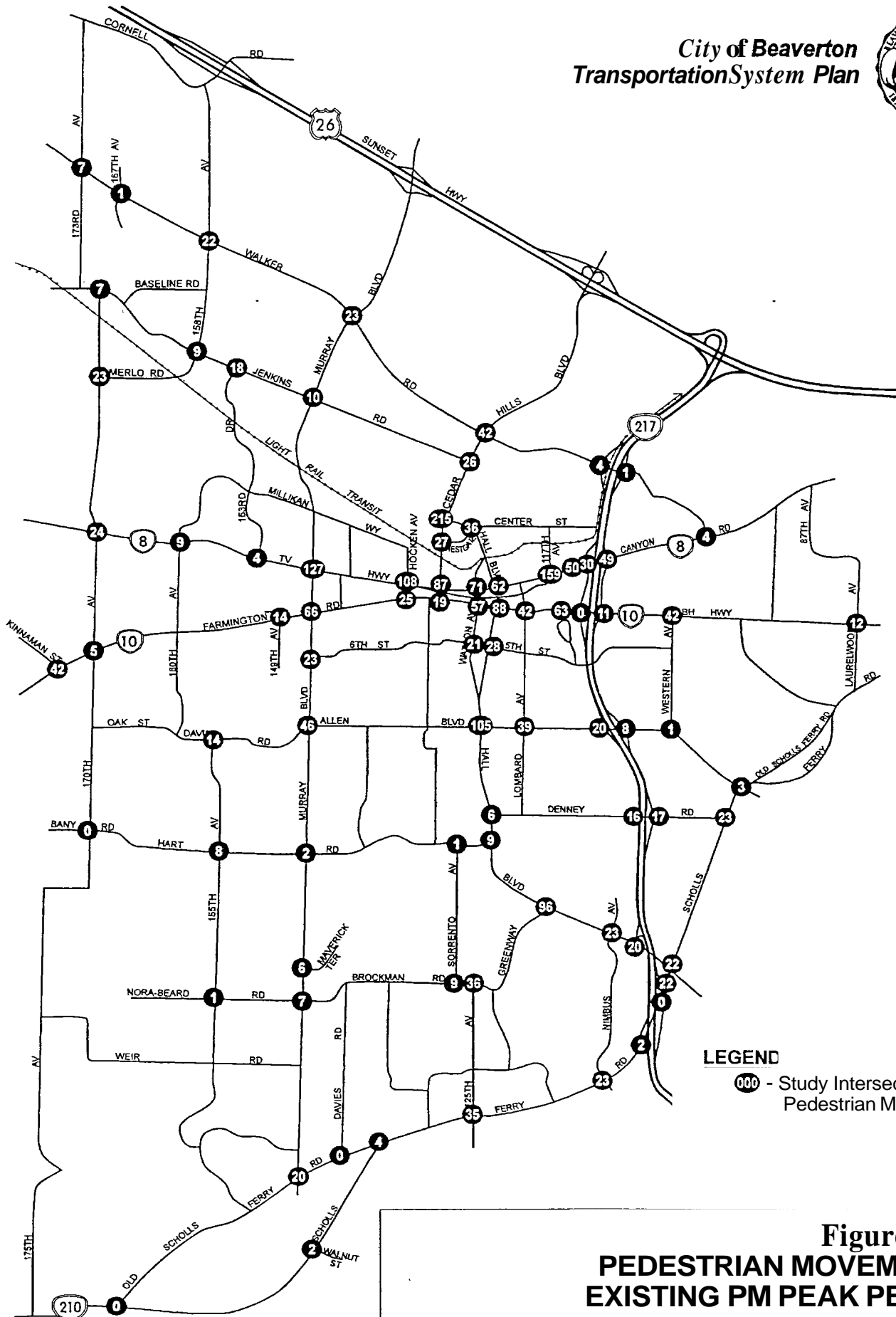
**Figure 3-13
EXISTING BICYCLE NETWORK**

**City of Beaverton
Transportation System Plan**



**Figure 3-14
EXISTING PEDESTRIAN NETWORK**

**City of Beaverton
Transportation System Plan**



LEGEND

000 - Study Intersection
Pedestrian Movements

**Figure 3-15
PEDESTRIAN MOVEMENTS
EXISTING PM PEAK PERIOD**

TRUCKS

Through freight truck routes that have been identified in the City of Beaverton Development Code are all major arterials except SW Watson and SW Hall Boulevard. Washington County identifies through truck routes on several roadways that have been classified as arterials. They also include Sunset Highway (US 26), Farmington Road (ORE 10), Beaverton-Hillsdale Highway (ORE 10), and Tualatin Valley Highway (ORE 8). This system provides connections with truck routes serving areas inside and outside of Beaverton making efficient truck movement and the delivery of raw materials and finished products possible. These routes are generally found in and serve areas where there is a concentration of commercial and/or industrial land uses. Figure 3-16 shows through freight truck routes within the vicinity of Beaverton according to Washington County.¹⁸ Percentage of truck movements throughout Beaverton are shown in Figure 3-17.

RAIL

All low-density rail lines within the vicinity of Beaverton are operated by Portland & Western (P&W), a sister company of Willamette & Pacific (W&P) Railroad and a subsidiary of Genesee & Wyoming Incorporated. Figure 3-18 shows the existing rail routes and crossing treatments within the boundaries of the City of Beaverton.

In relation to Beaverton, P&W currently has services extending north to Banks, Bendemeer, Hillsboro, Forest Grove and Stimson-Forestex. Services continue south to the Tigard and Tualatin area where rail lines branch to serve areas east to Brooklyn and south to Quinaby and Eugene.¹⁹

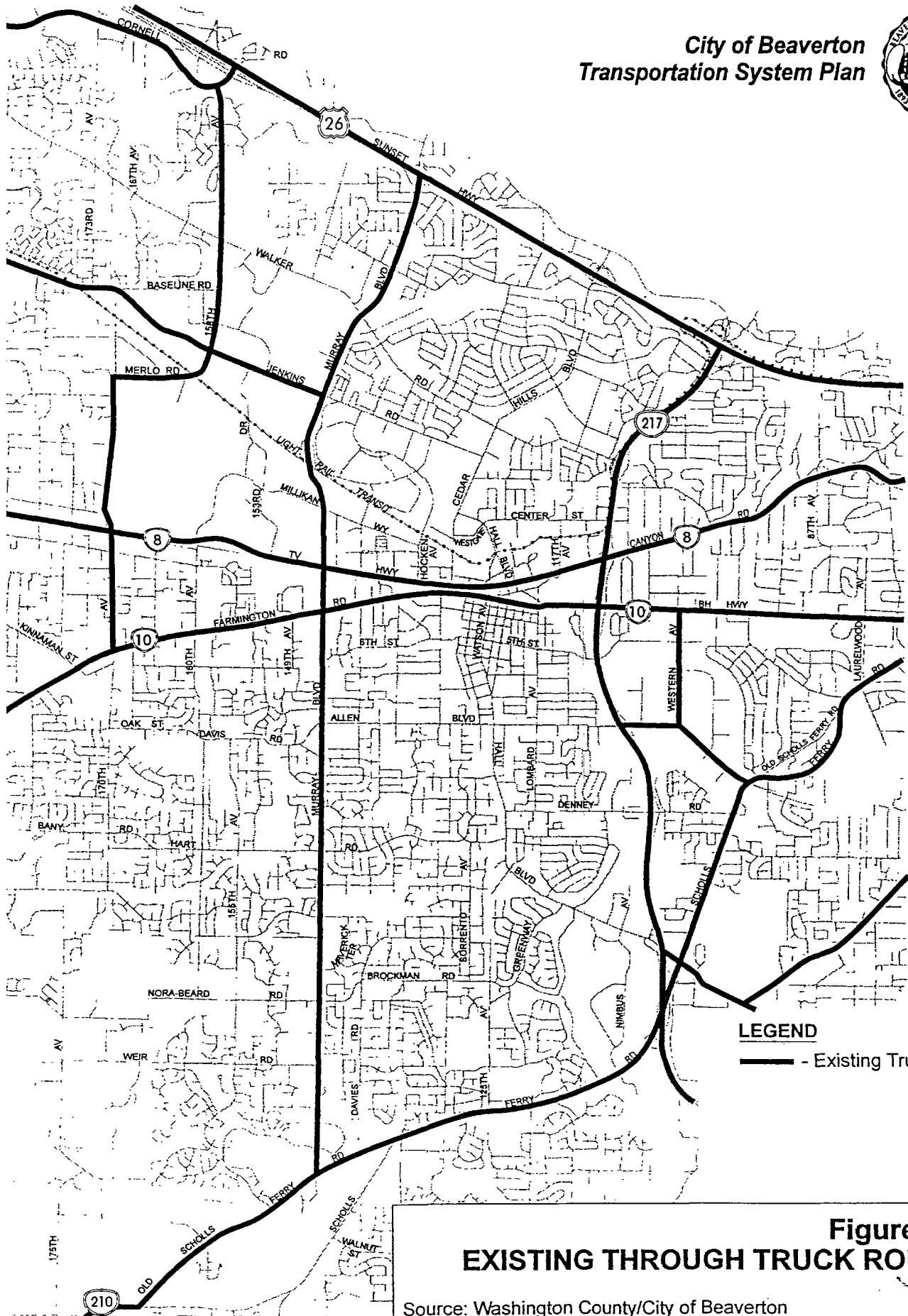
Trains generally operate in the Beaverton area seven days a week. Time of operation can vary, but the approximate number of trains remains constant. Table 3-16 is a list of train origins, destinations, times of operation, and numbers of trains per day.

Origin	Destination	Frequency and Hours of Operation	
		AM	PM
Beaverton (St. Mary's)	Hillsboro Depot	1 train daily Monday – Saturday	1 train daily Monday – Saturday
Beaverton (St. Mary's)	Beaverton and points south	8-10 trains daily, 7 days a week, schedule times vary	
Beaverton	Beaverton Drill	None	1 train daily, 5 nights per week Sunday – Friday
Beaverton	GM Lead	1 train daily Monday – Saturday	None

¹⁸ Washington County Transportation Plan, Comprehensive Plan Volume XV, October 1988.

¹⁹ Based on a map of the Portland & Western Railroad/Willamette and Pacific Railroad received from Susan Walsh-Enloe, Portland & Western Railroad, April 17, 1997.

**City of Beaverton
Transportation System Plan**



**Figure 3-16
EXISTING THROUGH TRUCK ROUTES**

Source: Washington County/City of Beaverton

City of Beaverton
Transportation System Plan

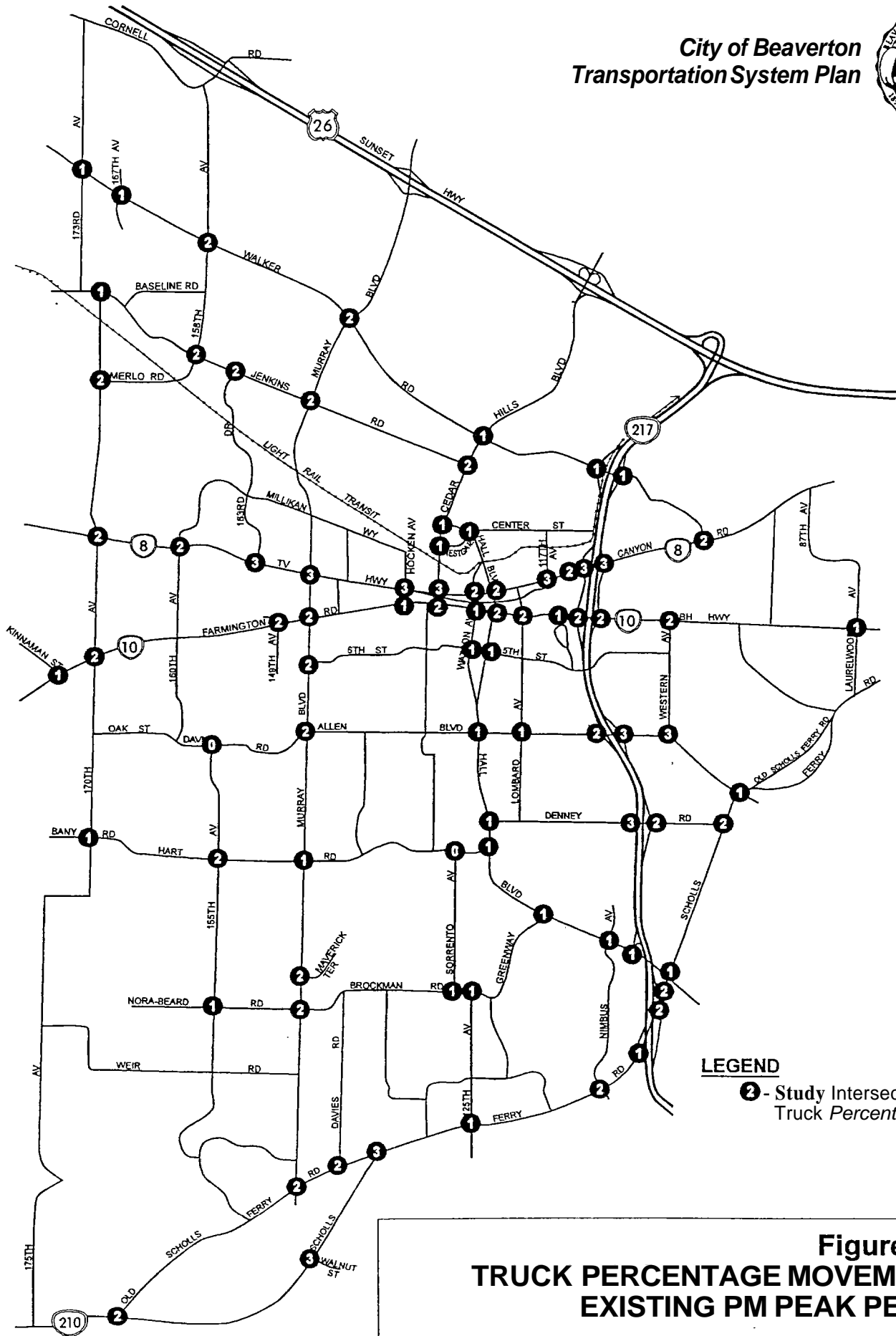
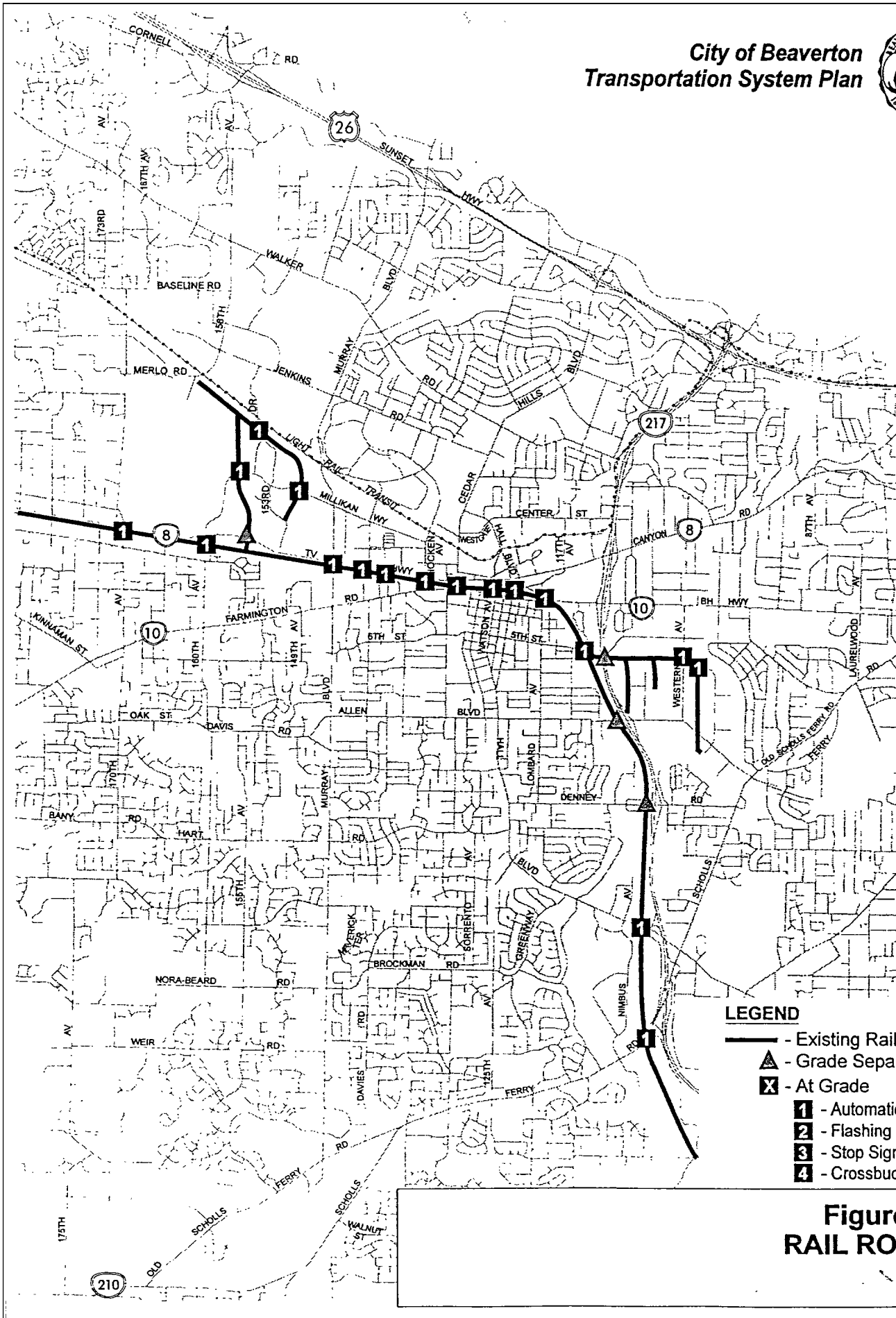


Figure 3-17
TRUCK PERCENTAGE MOVEMENTS
EXISTING PM PEAK PERIOD

**City of Beaverton
Transportation System Plan**



NOT
TO SCALE



**Figure 3-18
RAIL ROUTES**

AIR

Saint Vincent Hospital in Beaverton is listed as a heliport by the Oregon Department of Transportation. The heliport facilities include a 40' x 40' runway and one based aircraft.²⁰ With based aircraft numbering less than three, the facility is not required to maintain a comprehensive plan.²¹ The heliport facility supports Life Flight Network and other emergency medical aircraft.

WATER

There are no navigable waterways within the vicinity of the City of Beaverton that supports commercial or recreational use. Therefore, no policies or recommendations in this area of transportation is provided.

PIPELINE

The only major pipeline facilities running through the Beaverton area are high pressure natural gas feeder lines owned and operated by Northwest Natural Gas Company. Figure 3-19 shows the feeder line routes for Beaverton.²² The feeder lines serving the Beaverton area originate at Sauvie Island. From Beaverton, these lines branch south to Tigard and Sherwood.

PLANNED IMPROVEMENTS

A number of roadway improvements are already planned for the Beaverton area by various agencies. Beaverton SDC refers to projects related to Beaverton's recently adopted System Development Charge Ordinance. Other projects are listed on Beaverton's Capital Improvement Plan (CIP) that are either to be funded by private development or have unknown construction dates.

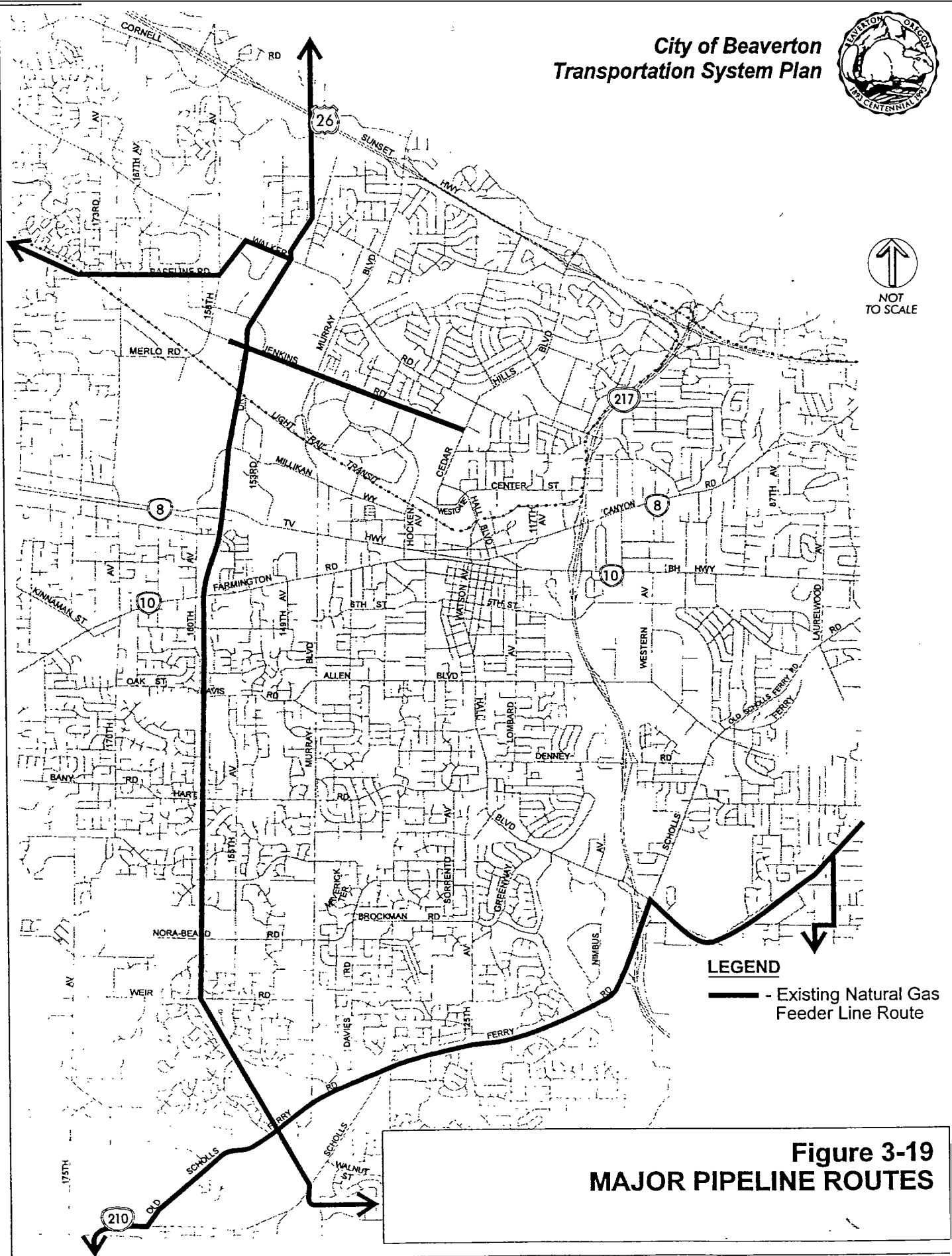
The Washington County Transportation Capital Improvement Program is a program that evaluates, ranks and schedules transportation capital project needs in Washington County for the next five years.²³ The projects are identified as either committed projects (projects under design or construction at the time of CIP preparation) and uncommitted projects (project submittals which have not been approved for funding). The uncommitted projects are grouped by project category and evaluated using project ranking criteria. The committed projects identified in the program are summarized in Table 3-17 (many of these have recently been completed).

²⁰ Based on Oregon Aviation Facilities listing obtained from the Oregon Department of Transportation, Thomas Highland, Aeronautics, April 29, 1997.

²¹ Senate Bill 1113 requires airport facilities with more than three based aircraft in operation since 1994 to maintain a comprehensive plan.

²² Based on the Portland Area Distribution System Map (Dated: October 1996) received from Northwest Natural Gas Company, Engineering Facilities Information System, April 28, 1997.

²³ *Washington County Transportation Capital Improvement Program FY1995/1996-FY 1999/2000*, Washington County, February 1996.



Committed Projects in Washington County CIP

Roadway/Intersection	Improvement
Farmington Road	Widen to 4 lanes with continuous center turn lane and bike lanes from Murray Boulevard to 172 nd Avenue.
Cedar Hills Boulevard	Complete sidewalks and bike lanes on both sides from Parkway to Butner and extend sidewalk on west side from Parkway to Huntington.
170th Avenue	Widen to 3 lanes with sidewalks and bikeway from Rigert to Blanton, widen to 5 lanes from Blanton to Alexander and add/modify traffic signals.
170 th /173 rd Avenue	Construct new road and widen existing road to three lanes with sidewalks and bikeway from Baseline Road to Walker Road.
Oak Street	Widen road and add bike and pedestrian facilities from Beaverton city limits to 170th Avenue.
Baseline Road	Widen to 5 lanes from 158th Ave to 170 th Ave with bike lanes and sidewalks (Tri-Met) and widen to 5 lanes from 170th Ave to 177th Ave with bike lanes and sidewalks (County).
Scholls Ferry Road	Add turn lanes and bike lanes to Scholls Ferry/Old Scholls Ferry from east of the Beaverton city limits to 175th Ave. Realign the Scholls Ferry/Old Scholls Ferry and Scholls Ferry/Beef Bend intersections, adding turn lanes and traffic signals.
Walker Rd/Mayfield Ave intersection	Construct eastbound left turn lane, install traffic signal and illumination.

The Statewide Transportation Improvement Program (STIP) is a program schedule for the Oregon Department of Transportation.²⁴ The purpose of the STIP is to schedule funding for Oregon's highest priority transportation projects for the next two years. Table 3-18 lists the projects that are in the STIP, MSTIP and/or RTP fiscally constrained scenario.

²⁴ *Statewide Transportation Improvement Program 1996-1998*, Oregon Department of Transportation, January 1996.

Table 3-18
Programmed Transportation Improvements List

Roadway/Intersection	Improvement	Jurisdiction
Farmington Road	Widen to 5 lanes with bike lanes from 172 nd Avenue to 209th.	ODOT
170 th Avenue	Widen to 3 lanes with sidewalks and bikeway from Rigert to Blanton to Alexander	Wash Co/ MSTIP
170 th /173 rd Avenue	Construct new road and widen existing road to three lanes with sidewalks and bikeway from Baseline Road to Walker Road.	Wash Co/ MSTIP
Jenkins: Murray to 158th	Widen to 5 lanes MM	Wash Co.
Jenkins: Cedar Hills to Murray	Widen to 3 lanes MM	Wash Co.
Allen: Menlo to Main	Widen to 5 lanes	City
Davis Road	Widen road and add bike and pedestrian facilities from Allen to 170 th Avenue.	City/MSTIP
Scholls Ferry Road	Add turn lanes and bike lanes to Scholls Ferry/Old Scholls Ferry from east of the Beaverton city limits to 175 th Ave. Realign the Scholls Ferry/Old Scholls Ferry and Scholls Ferry/Beef Bend intersections, adding turn lanes and traffic signals.	ODOT/ Wash Co
Walker Rd: Murray to 185th	Widen to 5 lanes with bike lanes and sidewalks	Wash Co
Cornell Road: 158th to 185th	Widen to 5 lanes with bike lanes and sidewalks	Wash Co
Lombard: Broadway to Farmington	Realign roadway to align with segment to the north (3 lanes)	City/MSTIP
Lombard: LRT to Center	Extend 3 lane section with sidewalks	City
125 Avenue: Greenway to Hall	Extend 3 lane section with sidewalks	City
6th/Division: Murray to 149th	Extend 2 lane roadway	City
Millikan: Hocken to Cedar Hills	Extend Millikan to the east to connect to Cedar Hills at Henry Street	City/MSTIP
US 26: ORE 217 to Murray	Widen highway to 6 lanes and add braided ramps	ODOT
Canyon Road: 110th to 117th	Provide median access control, relocate traffic signal, add turn lanes	ODOT
ORE 217: US 26 to Canyon	Widen highway and complete ramp work	ODOT
Murray Boulevard Overcrossing	Widen to four lanes Millikan to Terman	Wash Co.
Murray Boulevard: Farmington to Millikan	Traffic signal interconnect	ODOT
Hall at Scholls Ferry	Provide southbound right turn land	ODOT
ORE 217: TV Hwy to 72 nd Avenue	Widen freeway and rebuild auxillary lanes	ODOT